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A MONTHLY JOURNAL DEVOTED TO THE ELEVATOR AND GRAIN INTERESTS.

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Vol. II.

CHICAGO, ILLINOIS, FEBRUARY 15, 1884.

No. 8.

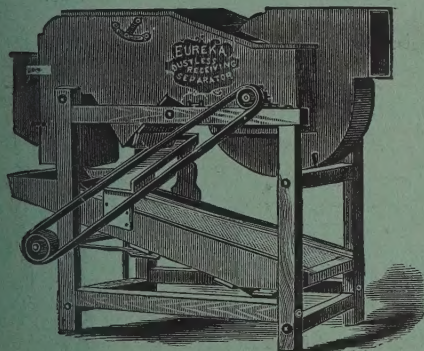
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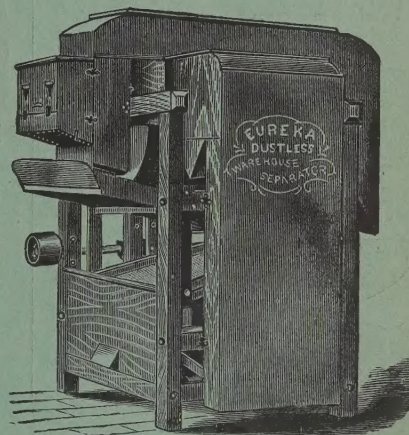
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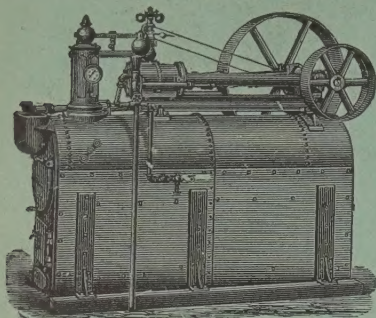
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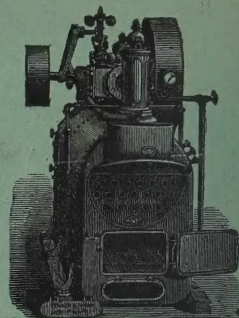
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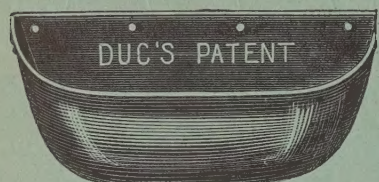
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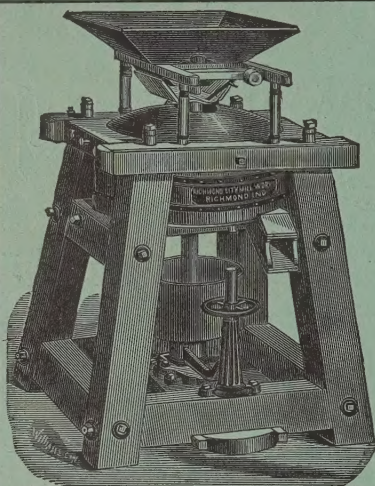
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INTERNATIONAL COMMERCE IN GRAIN.

Commerce in grain occupies the principal place in the general exchange of commodities in the world's markets. The Cincinnati *Price Current* presents an article from the pen of the scientist, Dr. Neumann Spallart, translated from *Le Fermier*, Paris, France, from which the following statements are taken relative to the rapid progress and development of the international commerce in grain during the last fifty years: From 1800 until 1833 Russia exported annually not more than 10,000,000 bushels of wheat; from 1844 to 1853 her annual average increased to over 32,000,000, and in later years has been from about 132,000,000 to 250,000,000 bushels. The United States during the first forty years of the century did not export annually an average value in grain of over \$22,000,000; her present exports of cereals and flour are valued at more than \$290,000,000. From 1800 to 1810 England did not require more than 3,700,000 bushels of grain and about 100,000 hundred weight of flour; now her demands are over 100,000,000 bushels of grain and 8,000,000 hundred weight of flour to supply her annual home requirements.

The United States ranks first among the grain exporting countries. From 1849 to 1880 the westward movement of her wheat production extended over nine degrees of longitude, and has far surpassed in value the products of her California gold placers and her Nevada ores. Of the American grain surplus England receives the larger proportion, taking grain and flour in 1879 to the value of \$107,092,081. France comes next, taking \$48,901,907, and Germany last with a demand for \$2,845,023. By 1860 the importance of the Russian grain exports had made her crop the arbiter to a great extent of the price, and was her principal source of revenue; and, although not holding now the supremacy, her cereal products are still one of her principal sources of prosperity. But in 1880 the grain exports of the ports of Odessa and Nicolaieff fell off some \$18,000,000 in value. The principal demand for Russian wheat comes from the same countries and in the same relative order as for the American grain; Germany, Great Britain, and Holland call for her rye, and her flour goes to Turkey, as well as to Sweden and Norway.

The grain commerce of Austro-Hungary has not escaped the influence of American competition. In the ten years, 1871-80, there was a notable excess of her exportation of grain products over her imports; the milling interests reaped the benefit, which have made great progress in Hungary, where the number of steam mills has increased during this period from 180 to 500. But since 1879 there has been a decrease in her exports of flour corresponding with an increase in those from the United States; the flour of the latter competing with that

of Hungary in the markets both of England and South America. The increasing importance of India as a grain-exporting country is noted by Dr. Spallart; under the development stimulated by government, her annual wheat production, according to the estimates of Dr. Watson Forbes, are about 35,000,000 quarters. Dr. Hunter confirms this estimate and claims that the wheat acreage of India could easily be increased from 10 to 20 per cent. and her average yield to thirteen bushels per acre. This amount of production must give a large surplus for exportation. The writer merely mentions Roumania, Denmark, Algeria, Egypt, Spain, Canada, Chili, the Argentine Republic, Cochin China—and he might have added Australia—among the grain exporting countries of varying importance.

In the front rank among the grain importing countries stands the United Kingdom, where the density, industry, and commercial activity of the people are steadily increasing, and where, with a decline in agriculture, there exists a growing demand for food products, especially the cereals. The total value of her imported food products was \$320,000,000 in 1853, and had increased to \$935,000,000 in 1880. Prior to 1860 the population of Great Britain not over 28,000,000, required 515 pounds of wheat per capita, and her area under wheat was 4,000,000 acres. But now her population of 35,000,000 requires 875 pounds per capita of wheat, and has only 3,000,000 acres under wheat cultivation. In the period of 1875-81 the average yearly consumption of wheat in Great Britain was about 194,370,000 bushels, of which a little less than one-half was grown at home, so that 19,000,000 of her inhabitants in ordinary times, and a larger number in bad seasons, must seek their bread from foreign sources. This state of things, with a decline in the exports of manufactured articles, and a series of bad crops, has produced a crisis in agricultural affairs there, and a royal commission has been charged to find out the causes and remedy. In 1881 the wheat area of Great Britain was reduced to 2,500,000, with about 2,000,000 acres sown to barley. All the world has combined to supply these necessities, but since 1876 the United States has taken the lead, and with Canada and Chili, says our author, supplies more than half the grain and flour requirements of England.

Germany, since 1874, has imported more wheat and flour than she has exported, and the bad crops of 1879 and 1880 largely increased her requirements. From 1872 to 1879 Germany imported annually a value of \$59,520,000 in grain. Much the larger part of this was rye, and the smaller part wheat, barley, and oats. From 1872 to 1874, Germany bought from 24 to 42 per cent. of her total grain imports from Russia; but beginning with 1876, until 1879, Austria furnished the principal part.

For various reasons, among which are bad crops, France also is a grain importing country, and seeks her

supplies in the United States and Russia. To this list of grain importing countries are to be added Belgium, Switzerland, the Low Countries, Italy, Sweden, and Norway, Portugal, and Greece, but these are of secondary importance.

Dr. Spallart shows by statistics that in the fifteen countries above described, the international commerce in grain during the fifteen years from 1860 to 1874 had increased \$342,400,000, or at the rate of 8 per cent. per annum. From 1874 to 1876 the increase was only \$54,000,000, or 2½ per cent. per annum; but in the years 1876-79 the increase was \$664,000,000 or 19½ per cent. annually. Since 1869 the international grain traffic has made great advances, attaining its height in 1879, when the United States was called upon to supply the deficiencies of all the European markets. The general market of the world had increased in the value of its grain trade from \$874,000,000 to \$1,614,000,000, and more recent estimates place it at nearer \$2,000,000,000.

THE OHIO CANALS.

The Chief Engineer of the Board of Public Works has received very full information of the damage done to the Hocking Valley Canal by the present flood. The washouts are numerous, and it is estimated that not less than \$50,000 will be required to repair the damage. Similar damages have been reported on all the canals in Central and Southern Ohio, as well as the canals in the eastern part of the state. It is roughly estimated that the losses will require an expenditure of not less than \$200,000, and the General Assembly will be called upon for an appropriation. It is expected that the agitation will be renewed to sell certain canal properties, as during the past few years they have been a burden to the state. Canal property has been sought by railroad projects for many years, but the state has steadily refused to abandon the property. The Hocking Canal, which will require an outlay of about \$50,000, paid but \$5,000 into the state treasury last year.

The *Railway Age* gives a summary of railway building of the United States for the past twelve months. It shows 6,600 miles main track laid at the approximate cost of \$165,000,000, making the total miles of railway in the country to date about 120,000. Construction in the United States in 1882 was the largest in the history of the country—11,600 miles; the year before it was 9,800. The states and territories which lead in construction this year are as follows: Montana, 413; Dakota, 469; Michigan, 406; New York, 375; Pennsylvania, 339; Ohio, 326; Mississippi, 305. New Hampshire, Rhode Island, Connecticut, Delaware, Nevada, and Wyoming are the only states and territories in which no new roads were built.

THE POOLE & HUNT WATER TUBE BOILER.

A combination of points of economy, efficiency and safety in any piece of mechanism is sure to attract the favorable attention of the users of machinery. Such a combination is claimed for the Poole & Hunt Water Tube Boiler, an illustration of which is given on this page. The high reputation of the firm who manufacture this boiler, coupled with the strong claims made for it, and the fact that it has now been in use for a dozen years, will no doubt insure the perusal, by steam users, of the following brief description of its principles of construction:

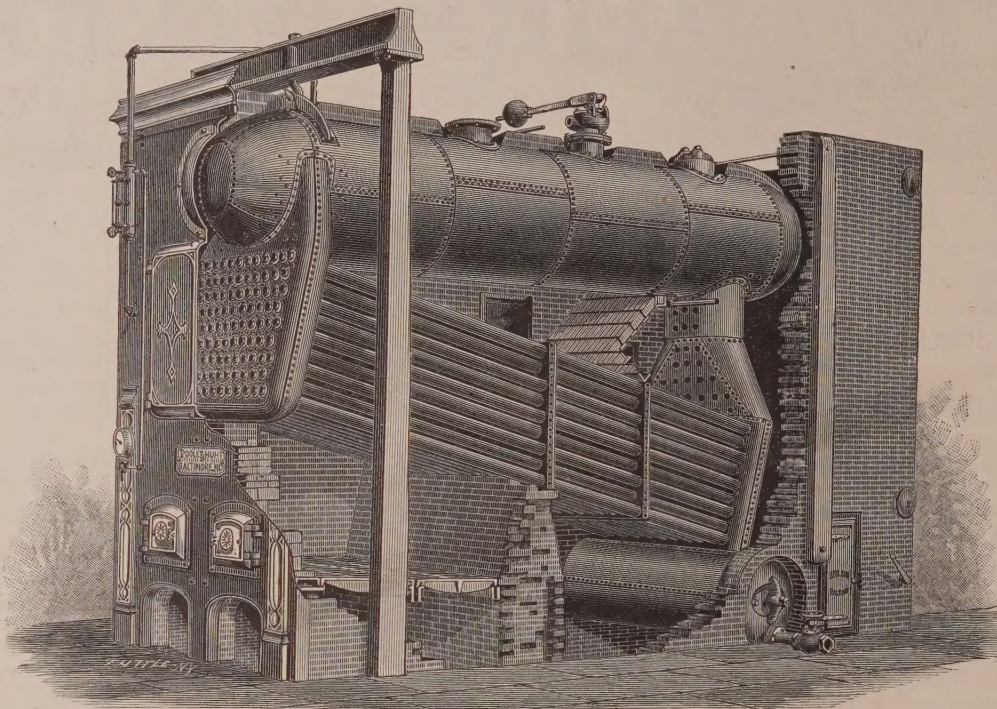
The illustration shows the general plan of the boiler, which is composed of lap-welded wrought-iron tubes, placed in an inclined position and connected by vertical passages at each end, with a horizontal steam and water drum. The tubes are "staggered," or so placed that one row comes over the spaces of the previous row. The vertical passages, or end connections, are made of two plates of the best flange iron, or steel, placed far enough apart to give full area for the circulation between the inclined tubes and horizontal drum. The plates are flanged at sides and bottom, and very strongly stay-bolted together. The tubes are expanded into the inner plate, and suitable hand-holes in the outer plate admit the tubes and allow for cleaning. The connection to the drum is made in the strongest manner, and, when subjected to a hydrostatic pressure of 300 pounds, shows no signs of weakness. The fire is made under the higher end of the tubes, and the products of combustion pass up between the tubes into a combustion chamber under the steam and water drum; from thence they pass down across the tubes, then once more up through the spaces between the tubes, and off to the chimney. A hand-hole at the end of each tube permits access thereto for cleaning, should they become scaled by the use of very bad water, and man-holes in the steam and mud drums admit access to them for the same purpose. Should it be necessary, for any cause, a tube may be readily removed and another substituted. The front end of boiler is suspended from a girder, supported by columns, entirely independent of the brick-work, and all the mountings, including gauges, safety valve, etc., are of the very best and most approved patterns.

The purpose and end of the above described construction are, that the water being inside the tubes, as it is heated, tends to rise toward the higher end, and as it is converted into steam—the mingled column of steam and water being of less specific gravity than the solid water at the back end of the boiler—rises through the front end connection into the drum above the tubes, where the steam separates from the water, and the latter flows back to the rear and down again through the tubes in a continuous circulation. As the end connections are large (the full area of the tubes being maintained), this circulation is very rapid, and produces three very important advantages: That it sweeps away each particle of steam as fast as formed, and supplies its place with a particle of water, thereby absorbing the heat of the fire to the best advantage; and, thoroughly separating from the water in the large disengaging surface in the steam and water drum, prevents what is known as "priming" or "foaming," the steam passing away from the boiler dry, even when the boiler is forced to its utmost capacity; that it causes a thorough comingling of the water throughout the boiler, and a consequent equable temperature, thus preventing those very serious strains from unequal expansion which occur in all boilers of ordinary construction, and which are a frequent cause of explosions; that the rapid circulation prevents, to a great

degree, the formation of deposits or incrustations upon the heating surfaces, sweeping them away and depositing them in the mud drum, at the rear and lowest point of the boiler, whence they are blown out.

The boiler, being composed of wrought iron tubes, with drums and connections made of the best wrought iron, or steel plates, has a great excess of strength over any pressure which it is desirable to use, and as the rapid circulation of the water insures equable temperatures in all parts, the strains due to unequal expansion cannot occur to deteriorate its strength. Should one of the tubes give out, which is not at all probable, no explosion could occur, and in case the water be allowed to get so low as to overheat the shell, and cause it to give out, what water remained would be confined to the tubes, and could not cause a destructive explosion like the single large body of water in the ordinary form of boilers.

Several thousand horse power of these boilers have been sold and are in use, and the experience thus gained



THE POOLE & HUNT WATER TUBE BOILER.

in their use recommend them as very durable and suitable in cases where high steam pressure is carried. The manufacturers, MESSRS. POOLE & HUNT, of Baltimore Md., will be pleased to give all desired particulars respecting this boiler to parties who may apply to them.

A FARMERS' ELEVATOR.

During the last three years or so a company composed of ten Scandinavian farmers have owned an elevator, erected and used by themselves, at St. Peter, Minn. The building cost \$2,800, and is divided into ten bins, of a capacity of 1,000 bushels each, which are appropriated by the membership, who haul their wheat in winter and store it until it can be advantageously sold, having only the expense of the interest on investment and repairs. Their sales have averaged, per bushel, \$1.14 for the past three years, being \$1.30 per bushel last year, and \$1.08 and \$1.14 in the two preceding years, respectively; usually sold about May 1. The capacity is found already to be too small, and will probably be doubled another season. One of them remarked: "We just say nothings to nobody, but sell our wheat when we see prices suits us. Und we 'bout always git a tollar a bushel wen odder fellers git eighty-five cents."

It is claimed that during the past few years the average annual wheat production of the world has exceeded its average wheat consumption as a breadstuff by 60,000,000 to 80,000,000 bushels. It is plain that the world can not go on storing away such a surplusage, and that production must be reduced, or prices will fall so low as to drive out of the industry all except the most favored producers. It is not likely that wheat will be used as cattle food in competition with oats and corn and barley. In the end, however, increased population will overtake the wheat production.

GRAIN ELEVATORS.

The best shape for a small grain-handling house, or elevator, as it is usually called, would be, say, 24 feet in width to 40 feet in length. There are many who like a square-shaped house, but they are certainly not so handy in many respects. Anywhere south of the northern Iowa line, and to some extent north of it, all elevators should be built with the view of handling both small grain and corn.

The small grain machinery and apparatus must be at one end of the building and the corn machinery at the other. The corn sheller and cleaner ought to be at the end of the building where the boiler and engine are located, as it makes it convenient to get the cobs for fuel for steam-raising purposes. The sheller should be set well down in the ground, if not troubled with water, and a large hopper built above it, wherein the corn can be dumped in bulk, so as to roll into the mouth of the sheller. The shelled corn and cobs will be taken from the sheller by an elevator to the top of the house and discharged into the cleaner, which should always be located in the top of the building.

The boot of the elevator ought to stand from 2½ feet to 4 feet below the bottom of the sheller, according to size of machine. If below the sheller there is trouble with water, it is best to make a water-tight pit for boot of elevator to stand in. That can be done either with brick and cement or wood. Dump rails should be hung five to seven inches forward of the center.

As the corn passes from the cleaner above, if sufficiently high, as it ought to be, it can be spouted direct to any bin that may be desired, while the cobs can be spouted out of doors, with the spout so arranged that a portion of them can be run into the boiler-room whenever desired.

When shelling machinery is fixed in the house and

everything arranged as it should be, it is only necessary to drive the wagon loaded with ear corn onto the dump rails and then dump the entire load down on the sheller. By this arrangement, however, horseshoes, car-links and pins, and boulders of various sorts and sizes, should never be substituted for corn. They weigh heavy and count up fast, it is true, but the sheller has not been made yet that will successfully handle those things.

Much care should be taken in hopping from sheller to elevator. Cobs do not run quite as freely as loose corn, and should therefore have plenty of fall and room. The small grain end of the elevator building should be arranged with a dump substantially as the other. Much of the small grain, especially wheat, is delivered in bulk, and the easiest way to unload is to dump it. The wheat will run directly from the dump hopper to the elevator, and thence up to the top of the building and through a separator to the various shipping bins. Many grain men prefer to have their separator on the first floor. It is much more convenient to have it there, because when cleaning dirty grain it requires considerable attention to keep the screens clean.

When the separator is located below it requires two stands of elevators to take care of the loose grain: one for receiving and depositing it into the dirty bins, from whence it is drawn into the separator; the other for taking it from the separator and putting it into the shipping bins. Separators with interchangeable sieves should be used. All then that is necessary to clean any kind of grain is simply to change the sieves, and the separator is ready for the work.—*The Modern Miller.*

The winter wheat of the last crop in Ohio is said to average only 54.55 pounds to the measured bushel, requiring a great deal more than the average to make a barrel of flour.

THE EARLY GRAIN TRADE OF CHICAGO.

The history of the grain trade of Chicago and its Board of Trade, for the first twenty years of its existence, has been recently presented to its readers by the *Sunday Herald* of this city, from which the following statements are taken: The business of dealing in grain and provisions here was started as far back as 1828, when the firm of Newberry & Dole entered into partnership, and a few years later built the first warehouse in the settlement, a large frame building on the corner of Dearborn and South Water streets, afterward erecting a larger one for grain storage on the north bank of the river near Rush street. J. S. Rumsey, in 1835, aged twelve, became a clerk, and in 1847 a member of the firm, the style being changed to Dole, Rumsey & Co., which has been perpetuated to the present time, while he and Marcus C. Sprague are the only survivors of the original members of the Chicago Board of Trade. The first wheat came to Chicago in 1833, before the day of railways and canals, and the price depended on guess-work and local demand. By 1845 there were a dozen firms on South Water street dealing in grain and produce, with warehouses on the river from State to Market streets. The year 1846 was the famine period in Ireland, and there was considerable speculation in grain. The nearest point then of railroad connection was Cleveland, and a great deal of rivalry existed in getting the earliest Eastern market quotations. In 1848 there were thirteen grain warehouses with a capacity of from 50,000 to 75,000 bushels each. They were operated by horse-power, which, at the suggestion of Mr. Rumsey, was placed in the attic. This year saw also the erection of the first steam elevator of the city, by R. C. Bristol. The above elevators were owned by Bristol, Caapin, Hadduck, G. S. Hubbard, Orrington Lunt, Neely, Pardee, Peck, Richmond, E. K. Rogers, Dole, Rumsey & Co., Walker & Winslow. Several of them had an extensive trade, keeping lines of vessels, plying in their interests between this and the ports of Detroit, Buffalo, etc. But the total storage capacity of the city up to Jan. 1, 1855, did not exceed 750,000 bushels.

On March 13, 1848, a call was issued for a meeting of business men to organize a Board of Trade. This scheme had been for some months mooted in the face of considerable ridicule. The call was signed by the following firms: Wadsworth, Dyer & Chapin, Geo. Steele, L. H. Burch & Co., Gurnee, Hayden & Co., H. H. Magie & Co., Neef & Church, John H. Kinzie, Norton, Walter & Co., De Wolf & Co., Charles Walker, Thomas Hale, Thomas Richmond, and Raymond, Gibbs & Co. The meeting was well attended, and a committee appointed to prepare a form of organization, whose report was adopted at a meeting on the first Monday of April. The daily meetings were held in a room about twenty feet square, over Gage & Haines' flour store on South Water street, rented for \$110 per year. Thos. Dyer was elected president; Chas. H. Walker and John P. Chapin, vice-presidents; and W. L. Whitney, secretary. The daily meetings from 11 to 12 o'clock at first were poorly attended, and the scoffing was renewed. But two weeks from the organization Thos. Richmond brought on the floor 3,000 bushels of wheat, to ship to Buffalo, which was followed in a week by the purchase of 1,000 more by another party, and the ice was thus fairly broken. Although merchants reported their outside operations, the board's business was still slow and fluctuating. At about this time the completion of the Illinois and Michigan Canal opened up a large grain territory to Chicago trade, and a year later the initiation of the Chicago & Galena Railroad worked to the advantage of the traffic. With the other old officers retained, J. C. Dodge was elected Secretary in 1849; a committee was appointed to procure daily telegraphic market reports from the East, and the board moved to larger accommodations on South Water and Wells streets, changing their hour of meeting to nine A. M.

The Board of Trade of Chicago, so entitled, was duly incorporated in 1850. The membership fee was \$5, and annual dues about \$3; the hour was changed to 12 o'clock M. In the same year Stephen A. Douglas and Gen. Shields were complimented with a vote of thanks by the board for their efforts in obtaining a land grant from Congress to aid in the construction of the Illinois Central Railroad. The years 1851-2 were not especially encouraging to the board. In 1853 the fifth annual meeting was held at quarters changed for the third time, on Dearborn, between South Water and Lake streets, and

the notorious cracker, cheese and beer free lunch was inaugurated. Besides this important stimulant to attendance, a resolution was adopted equalizing rates for grain handling; also for founding a bank with a capital of \$5,000,000 in aid of commerce; and a committee was appointed to obtain appropriations for taking the soundings of Chicago harbor.

In 1854 a large increase in the business of the board was shown; the membership had largely increased, and a room, occupying the whole third floor of Steele's building, corner of La Salle and South Water streets, was rented at \$250 per annum. The next year a reading room was established. Messrs. Wm. Bross and Geo. Steele were also sent as a committee to Canada to advocate the Georgian Bay Canal, for which they obtained a charter, but no action was taken upon it. The free lunch was dropped at about this time, and a large falling off in attendance followed. But the board in 1856 obtained forty-five new members, inaugurated admission tickets, and was fairly started on the prosperous career in which its growth has been rapid and continuous. Dealing in futures had existed from the start, but were simply business transactions; the speculation now commenced in earnest, which has attained proportions that shadow the markets of the world. At this period the board rented the ground floor of Walters Building for \$1,200 a year, and returned to the nine o'clock hour. The total shipments of wheat from this port in 1838 were only 78 bushels; in 1858 they had increased to an aggregate of 8,850,257 bushels.

THE WORLD'S WHEAT PRODUCTION.

The following is an approximation of the average annual wheat production of the United States, Canada, Europe and other countries, represented in quarters and bushels:

	Quarters.	Bushels.
United States.....	60,000,000	480,000,000
Canada.....	5,000,000	40,000,000
France.....	35,500,000	284,000,000
Russia.....	35,000,000	280,000,000
Italy.....	17,500,000	140,000,000
Spain.....	15,500,000	124,000,000
Germany.....	13,000,000	104,000,000
Austria and Hungary.....	13,500,000	108,000,000
United Kingdom.....	11,900,000	95,200,000
Turkey in Europe.....	5,000,000	40,000,000
Roumania.....	4,250,000	34,000,000
Belgium.....	3,000,000	24,000,000
Holland.....	7 0/100	6,000,000
Portugal.....	1,100,000	8,800,000
Greece.....	600,000	4,800,000
Servia.....	550,000	4,400,000
Denmark.....	575,000	4,600,000
Sweden.....	600,000	4,800,000
Switzerland.....	275,000	2,200,000
Algeria.....	4,000,000	32,000,000
Egypt.....	2,000,000	16,000,000
Australia.....	3,000,000	24,000,000
New Zealand.....	1,000,000	8,000,000
India.....	30,000,000	240,000,000
Chili, Argentine Republic, etc.....	3,000,000	24,000,000
Total.....	253,500,000	2,028,000,000

IOWA CORN.

Secretary Shaffer, of the Iowa State Agricultural Society, was asked for a few items concerning the corn crop of last year, yield, condition, etc., and what steps farmers were taking to obtain a supply of good seed corn for 1884. Mr. Shaffer said: "I estimate Iowa's corn crop for 1883 at about 171,500,000 bushels, produced from 7,000,000 acres, but an average yield of twenty-four and one-half bushels per acre. This was a loss to the state, as compared with the crop of 1880, of 103,534,247 bushels. The quality on the whole is poorer. The scarcity of the crop may be realized from the fact that there is considerable importation of corn from Kansas for feeding purposes. There is very little old corn on hand. From all the information I can gather, farmers all over the state will depend upon home-grown corn for seed. In the western and northwestern parts of the state especially, there is a sufficiency of good seed corn, and there is hardly a county in the state that has not more or less. The farmers of Iowa will give a wide berth to Kansas and Nebraska seed. The year 1883 will be long remembered as one of disaster resulting from the use of foreign seed. We shall have plenty of corn for seed from the crop of 1883, and you may rest assured that it won't be an experimental season. The farmers won't indulge in the importation of seed corn this year."

Where machinery is used, the Drew Oil Cup will save 50 per cent. of the oil. Write for circular. Borden, Selleck & Co., Chicago, Ill.

Late Patents.

Bearing Date of Jan. 15, 1884.

GRAIN CLEANER.—Elnathan Phelps, Hartford, Mich. (No model.) No. 292,044. Filed Oct. 17, 1883.

Bearing Date of Jan. 22, 1884.

BELT FASTENER.—John B. Norton, Philadelphia, Pa. (No model.) No. 292,173. Filed June 5, 1883.

BELT TIGHTENER.—Frank Sager, Pittsburgh, Pa., assignor of one-third to Charles Holmes, same place. (No model.) No. 292,368. Filed June 15, 1883.

GRAIN MEASURING MACHINE.—Joseph Nafziger, Hope, Ill. (Model.) No. 292,346. Filed May 29, 1883.

COMBINED GRAIN SCALE, BAGGER AND REGISTER.—Charles J. Leach and Allen Olds, Hartford, Mich. (No model.) No. 292,326. Filed June 13, 1883.

Bearing Date of Jan. 29, 1884.

SEPARATOR AND CONVEYOR.—John Spencer Fairly, Charleston, S. C. (No model.) No. 292,550. Filed May 3, 1883.

CONSTRUCTION OF MALT AND GRAIN MILLS.—Charles John Hexamer, Philadelphia, Pa. (No model.) No. 292,488. Filed Feb. 27, 1883.

A LONDON WAREHOUSE.

The warehouse demands of the grain trade of London, Eng., are rapidly increasing, the aggregate tonnage received on the Thames, in 1883, being over 2,000,000 quarters, against a little over 1,800,000 and 1,400,000 in the two preceding years respectively. To meet this increasing demand for handling facilities, an additional storehouse has been lately added to the Surry Dock granaries with the recent improved elevator machinery. The new building has but one floor above ground, and is 500 feet long and 60 feet wide, with a capacity for handling 17,000 quarters of grain, in addition to the 200,000 quarters of the old building. In the latter there are no real elevators, but the grain is hauled from the hold of vessel and dropped into hoppers. Outside the new building are two movable wooden structures, 64 feet in height, set on tramways. The grain is scooped from the vessels by means of huge double-jawed "grabs," seizing about three-fourths of a ton at once, which is drawn up by cranes, emptied into hoppers inside the elevators, weighed, and then carried up some 50 feet and shot down through a telescopic spout into the traveler, having a band 22 inches wide, instead of 14, as in the older building; by this means 80 tons of grain per hour can be deposited in any part of the two floors of the granary. These traveling belts are of India rubber, with edges slightly curved, and are kept revolving as tight and flat as possible on drums, by means of hydraulic power, and carry the grain safely and swiftly up considerable inclines. The weighing hopper pours the grain into a canvas receptacle shut off at a sack's weight, from which it passes to a glazed well, and thence is taken by a traveler to different bins, or to perpendicular wooden spouts lined with sheet-iron, down which the grain passes to the middle of the lower floor. From thence by means of revolving spouts it is sent to its destination at any point of the compass.

Speaking of the corn inspection of Chicago the New York *Tribune* says in a Chicago dispatch of late date: "It was hinted last week that the influence of a certain railroad and warehouse commissioner would cause an easing up of the inspection. It looks now as if these hints were made upon pretty good authority." If the *Tribune* has any information of this kind it should give the name of the commissioner referred to. The railroad and warehouse commissioners are public officers of the state. It is their duty to enforce the laws and regulations and not "to ease them up" in favor of any one, no matter how powerful. The commissioners are the servants of the tax-payers, the majority of whom in this state are farmers, and for them in the interests of Board of Trade speculators to "ease up" the strictness of the inspection on which the farmers depend for a reliable market, would be an outrageous offense. It is no business of our grain inspectors to consider from what sections of the country grain comes, nor to whom it belongs. Their duty is simply to determine whether it comes up to a certain standard. If it does not do so, they have but to declare the facts, regardless of the appeals of interested parties or the pressure of "influence."—Chicago *Tribune*.

THE NEW BUILDING OF THE CHICAGO BOARD OF TRADE.

The new Temple of Commerce which the Chicago Board of Trade is erecting, is steadily moving on toward completion, although on account of contractors' delays in furnishing the granite and the unusual severity of the late winter weather, it will be delayed until next autumn instead of being accomplished by May 1, as anticipated. But the work already shows the beauty and magnificence of its design, wherein the architect, W. W. Boyington, has successfully united utility and an elaborate ornamentation which in no way injures the grand simplicity of its modern Gothic style. The corner stone was laid on Dec. 13, 1882, with imposing ceremonies, in which representatives of all classes united with the business magnates and celebrities of our city, whose growth and commercial importance are as solid and substantial as though she were the product of centuries, instead of the years of one generation.

The new building is located at the foot of La Salle street, on the block bounded by Jackson and Van Buren streets, north and south, Pacific avenue and Sherman streets, east and west, and has a frontage of 174 feet on Jackson street, and is 235 feet in depth. The grand tower has 32 feet frontage and will be 240 feet in height, or 300 feet to top of flag-staff; the masonry will extend 225 feet, at which point there will be a clock dial 12 feet in diameter on each of its four sides; the remainder will be of iron. The material used for building is the Fox Island granite. The foundations, broad and deep, are laid on a uniform bed of blue clay, 16 feet below the sidewalk grade. Two feet below this surface, or seven below the lowest drainage, is embedded in cement a layer of three-inch plank, on which are placed 12x12 oak timbers, 12 inches apart, with the inter-spaces filled in with solid concrete, and followed by another layer of three-inch plank, strongly spiked down. In important bearings this process was repeated, making a depth of about six feet. On this are laid large blocks of dimension stones, all thoroughly fitted and bedded, to the height of the ground floor, or sixteen feet.

The main facade, fronting La Salle street, is crowned by the center tower above described. This tower is relieved in its various sections by offsets, belts, corbels, cornices, etc., and is topped out with angular lines to a look out balcony 200 feet above the sidewalk, tapering into a prominent pinnacle forty feet high, which supports a flag-staff thirty-five feet in height. The height from the sidewalk to the top of the cornice is 108 feet. At the top of the tower is poised a statue of Mercury. The tower projects from the main building about six feet and the main entrance at its base somewhat further. The entrance, or portico, is thirty-two feet wide and forty-six feet high, supported by great granite columns on each side. The corner pavilions, flanking the tower, are carried up some distance, and project about four feet from the main structure. The two front corners of the main or La Salle street front of the structure are finished with pavilions twenty-two feet square, terminating in high roofs considerably above the main building. The two sides are more plainly treated. On the exterior will be deeply cut panel balustrades, surmounting the sides over the center of the main hall portion of the building, which will be fifty-six feet long and twenty-nine feet high, braced on each side with huge carved brackets resting against two large griffin figures. In the center of this tablet there will be a group of nine mammoth statue figures, in different attitudes, representing trade and commerce, with the various implements of art and agriculture, all cut in bold relief from solid granite. These

will adorn both the Pacific avenue and Sherman street fronts. There will be several other prominent statue figures cut in granite in different parts of the building.

The main or Board of Trade part proper will occupy the whole width of the lot 173 feet nine inches in width by 160 feet deep, leaving ground 173 feet nine inches by sixty-five feet for the adjoining office building. The floor surface of the great trading hall is 23,000 feet. The ground floor will be only one step above the sidewalk, and the main Board of Trade hall floor will be eighteen feet above the sidewalk. The grand entrance will be in front of La Salle street, through the center tower. A

portion of the building. The main hall will be 80 feet high, with a glass ceiling 70x80 feet. The walls of this portion of the building will be alternately adorned with large windows and massive marble columns, upon which there will be ponderous capitals, cornices, and brackets richly treated, and interspersed with appropriate frescoes. The building is to be practically fire-proof, as all the modern appliances of fire-proofing are to be used in its construction.

The interior view which we represent on the opposite page gives but a faint impression of the real elegance of the grandest temple devoted to trade and commerce that

has yet been erected on this continent.

The minute and rich details of the finish of this room cannot be properly represented in a cut of this size. Our object in producing this is to convey an idea of the magnitude of the room, more than to represent its real elegance, which the engraver has fallen short of doing. The new room as compared with the present one will have more than twice the floor surface. The height of the ceiling is 80 feet whilst the present room is 50 feet, and all the proportions are on a scale commensurate with the size. Our cut represents a view from the rear looking to the front. The first object in the foreground shows the public gallery, elevated 17 feet above the main floor. The main floor represents three trading pits, around which the traffic of each day is more or less exciting, according to the ups and downs of the grain and provision markets of the country. The view of the front sides and ceiling shows the extent of the immense windows in the walls and the skylight and the private front gallery. The skylight and transoms of the windows will be richly ornamental stained glass. Those in the transoms are to represent Trade, Commerce, Agriculture, Rail-roading, Engineering, Astronomy, etc. The walls and ceiling will be richly frescoed around the grand skylight in oil colors. The walls of the room will be wainscoted with marble of various colors, to the height of 6 feet. The bases of the columns will be marble to the height of 8 feet, and the shaft above will be scagliola marble of colors to correspond with the bases, all of which will be highly polished. There will not be any wood finish in this room except the window frames, doors, and gallery front. The floor will be hard white maple, as it is much more desirable to stand on than marble. The room will be warmed by indirect steam heat, forced into the room, by fans in basement, around the bases of the columns and



THE NEW BUILDING OF THE CHICAGO BOARD OF TRADE.

large hallway and commodious vestibule are first passed through, from which there are to be two commodious flights of grand and imposing granite stairways leading to the main hall floor. On each side street and from the court there will be similar but less pretentious entrances, together with two commodious flights of iron stairs, and four large elevators leading to the top of the building. The office portion is to be nine stories high, or 150 feet above the sidewalk. The main hall portion of the building will range somewhat less in height on the sides, but the front will be about the same height. The ground floor under main building will be used for offices, banking rooms, and a large hall for the delivery and settlement clerks. All the offices here and in the office building are to be supplied with fire-proof safes.

On the second floor are the main exchange and call board rooms, and official, committee, and lavatory rooms. The main hall will occupy 174 feet by 155 feet, with galleries at each end. The call board will be 70x80 feet, with galleries, and will occupy the height of two stories, or thirty-five feet, on the east and south side of the building. The president, secretary, clerks, and committees will occupy the west and south portions of the two stories opposite the call board. Above this there will be six stories of offices in the south end or office

through the risers of the windows. The ventilation will be from the floor along the outside of the room and down through the several pits. This will also be effected by fans located in the basement for winter purposes, and for summer there will be a series of fans in the roof for sultry and extreme warm weather, so that both upward and downward ventilation can be used at the same time, so as to change the air in the room every fifteen or twenty minutes.

The office building in the rear and adjoining the Board of Trade quarters is in the same style externally as the main portion. Excepting space in two stories for a call board room on one side and Board of Trade official rooms on the other, this part will be divided into offices. It will be run up nine stories, with a large interior skylight in addition to the numerous windows on the outside.

The roof is remarkable for the novelty of its support. It is sustained by four great iron trusses, running north and south, supported on eight iron columns, running from foundation to roof. By this means the walls are relieved of this burden, while the minute swaying of the columns allows the iron roof to contract and expand without injuring the masonry.

Speculation in corn in Chicago is dull.

Grain Commission Cards.

E. & H. C. EDWARDS,
GRAIN AND MILLSTUFFS,
 Room 10, Metropolitan Block,
 N. W. Cor. La Salle and Randolph Sts. CHICAGO.
 Warehouse, 249, 251, 253 & 255 Michigan St.

R. B. HOWARD,
Commission Merchant,
 GRAIN, MILLSTUFFS, HAY, Etc.
 No. 162 La Salle Street,
 CHICAGO.

W. NORTHUP & CO.,
Commission Merchants
GRAIN AND PROVISIONS
 BOUGHT AND SOLD UPON USUAL MARGINS. Correspondence Solicited. Established 1864.
 114 La Salle Street, CHICAGO.

Grain Commission Cards.

M. P. AIKEN & CO.,
Commission Merchants,
EMPIRE BLOCK, CHICAGO.

Special Attention to CONSIGNMENTS of GRAIN
 and SEEDS. ORDERS in GRAIN and PRO-
 VISIONS Executed with Dispatch.

Orders for Grain and Mill Stuffs Promptly Filled.

WARNER & WILBUR,
General Commission Merchants
 Room 28, Metropolitan Block, Chicago.

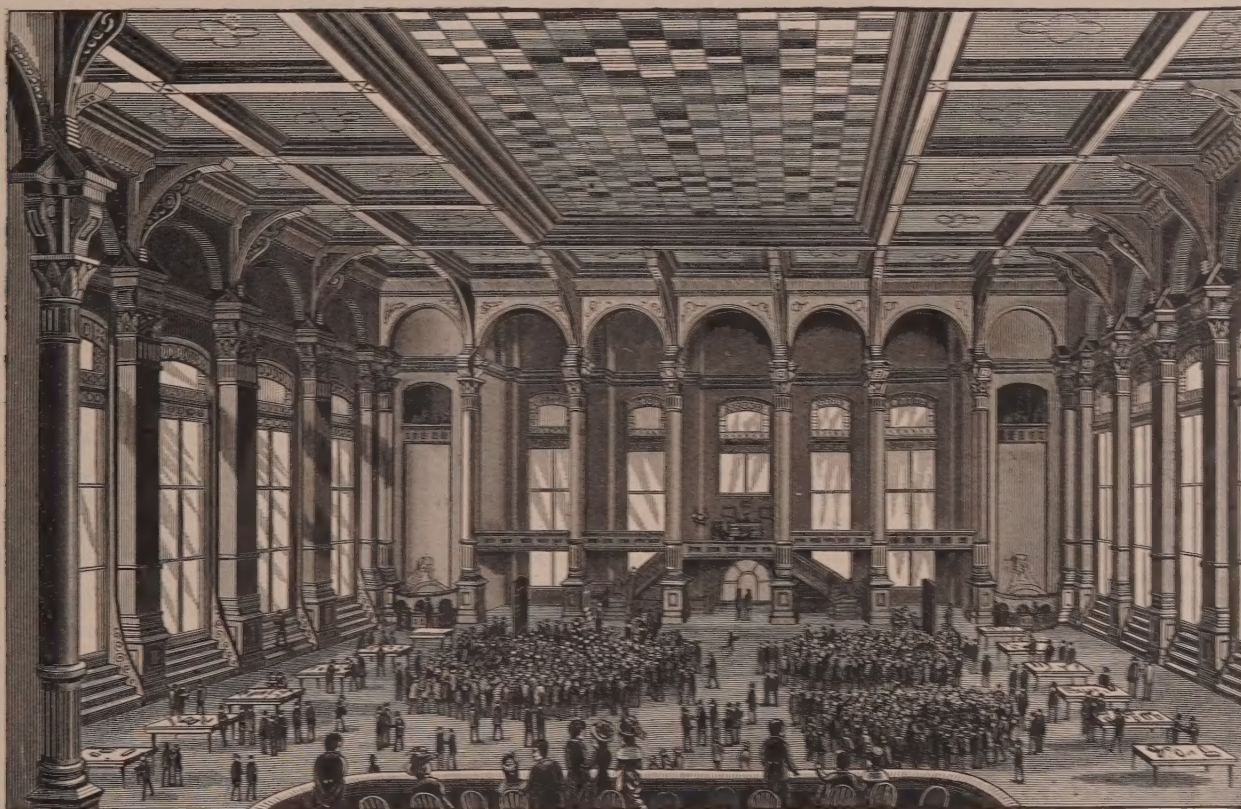
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Grain Commission Cards.

ESTABLISHED 1861.
CHANDLER-BROWN CO.
 GRAIN AND SEED
COMMISSION MERCHANTS,
 J. A. Brown, CHICAGO: E. H. Chandler, MILWAUKEE.
 H. E. Chandler, 177 La Salle Street. G. W. Chandler, Chamber of
 D. G. Owen, Street. A. H. Pirle, Commerce.

C. F. LISTMAN & CO.,
Commission Merchants and Exporters,
48 Metropolitan Block,
Flour and Grain. CHICAGO,
 Communications from Millers Solicited, with Offers and Sam-
 ples. Liberal Advances on Consignments.
 Highest References.

GOODRIDGE, FIELD & CO.;
GRAIN AND FLOUR,
NORFOLK, VA.
 Business attended to at Newport News (Eastern Terminus
 C. & O. Railroad).



INTERIOR OF MAIN HALL IN THE CHICAGO BOARD OF TRADE'S NEW BUILDING.

L. H. VOIGT. A. M. VOIGT
VOIGT, MAHOOD & CO.,
PRODUCE COMMISSION MERCHANTS.

For the sale of
BUTTER, CHEESE, EGGS, POULTRY,
 Beans, Peas, Maple Sugar, Fancy Creamery Butter, Green and
 Dried Fruits, Potatoes, Flour, Grain and Produce generally; Cali-
 fornia Honey and Fruits, Lima Beans, Butter Tubs and Egg Cases.
 Market reports sent to shippers weekly. Cooling rooms for butter.
 257 Liberty Street, PITTSBURGH, PA.

F. H. PEAVEY & CO.,
Commission Merchants,
 327 Hennepin Ave., Rooms 44 & 45, Minneapolis, Minn.

Extra Facilities for furnishing Coarse Grain in large lots.
 Prompt Attention given to any business intrusted to our care.

F. SCHWARTZ. H. SCHWARTZ.
F. SCHWARTZ & BRO.,
Gen'l Commission Merchants
 1601 TO 1605 BROADWAY,
GRAIN! St. Louis. FLOUR!

Liberal Advances Made on Consignments.

E. B. OWENS & CO.,
GRAIN AND FLOUR,
 153 West Pratt Street,
 BALTIMORE, MD.

REFERENCES: Western National Bank;
 Citizens' National Bank.

ESTABLISHED 1866.
J. VAN WINT,
Grain and Flour Agent,
ANTWERP, BELGIUM,

REFERENCES AND CABLE CODES FURNISHED.

N. A. SANBORN,
 Receiver and Eastern Agent
 FOR SALE OF
WESTERN GRAIN, FLOUR, BRAN, FEED,
 Seeds, Pork, Beef, Lard.
 Office, No. 1 Exchange Street,
 PORTLAND, MAINE

BUCKLEY, PURSLEY & CO.,
 (Successors to Buckley & Co. and Thos. J. Pursley.)
Grain Commission Merchants
 Room 10, Chamber Commerce, PEORIA, ILL.

Returns prompt. Correspondence invited. Best market in the
 world on low grade corn. Charges for selling very small. Refer-
 ences: First National Bank, Mechanics' National Bank, Peoria,
 National Bank, Callender, Ayres & Co.'s Bank.

A. B. TAYLOR. D. C. MOAK.
A. B. TAYLOR & CO.,
Commission Merchants
 Grain, Flour and Millstuffs.
Choice Milling Wheat a Specialty
 Careful attention given to consignments and orders for wheat,
 flour and bran, filled at lowest prices.
MINNEAPOLIS, MINN.

T. B. SIMS & CO.,
General Produce and Commission Merchants
 No. 3 Union Street,
MEMPHIS, TENN.
 SPECIALTIES:
 Flour, Meal, Corn, Oats, Hay and Provisions.

General Items.

The U. S. Government is using large numbers of the Howe Scales. Borden, Selleck & Co., agents, Chicago, Ill.

David Dows & Co. are quoted as authority for the statement that current receipts of wheat in St. Paul and Minneapolis are chiefly from country elevators, as farmers in the Northwest are not delivering much at present.

While it is true that Mark Lane makes the price for our surplus wheat, yet as our own people consume fully 800,000 bushels per day, it is evident this latter demand is an important factor in determining prices, especially in years of short crops.

There is very little corn in store along the Illinois & Michigan Canal, and scarcely any rye; but the warehouses are reported to be well filled with oats, which are held in the country because the May premium here pays well for carrying them there.

By the new Morrison Tariff Bill, the duty on rye and barley is reduced from 10 cents to 8 cents per bushel, the duty on potatoes from 15 cents to 12 cents per bushel, and the duty on potato starch from 2 cents to 1 1/2-10 cents per pound. These products paid nearly \$3,200,000 in duties in 1882.

David Dows, the well-known grain merchant, whose health has recently been somewhat impaired, is once more at his desk in his counting house. Though slightly paler than usual, there is nothing in his appearance to indicate anything but the most robust physical condition consistent with his advanced years.

H. C. Parker, traffic manager of the Peoria, Decatur & Evansville Road, has asked the Illinois Board of Railway and Warehouse Commissioners to allow him to charge one cent per bushel more on grain when loaded from wagons than when taken from elevators. The board has taken the request under advisement.

The Lake Superior Elevator Co. of Duluth have given an order for seventeen 700-bushel hopper scales. These scales are to be placed in their new elevator to be built this season. This is the largest order ever placed for scales in the Northwest, aggregating a capacity of 11,900 bushels, to equal 714,000 pounds, or 357 tons at one draft.

The following notice was given last month to grain dealers and shippers by the roads centering in Chicago. On and after Jan. 10 the following rules will govern regarding charges received on grain at Chicago: Grain in bulk consigned to Chicago, local, will be immediately unloaded in elevators, after arrival and inspection, unless way-billed for "track delivery," or held out by consignees. Grain held out and afterward ordered to connecting lines, private tracks, or to elevators, will be subject to a charge of \$3 per car for switching; grain billed for track delivery and afterward ordered to elevators, to private tracks, or to connecting lines, will be subject to a charge of \$1 per car for switching; cars to be unloaded on team track must be unloaded within forty-eight hours after being placed in position to load; cars reconsigned to other lines, private tracks, or to elevators, must be so ordered within thirty-six hours after inspection; delay beyond these hours will subject cars to a charge for demurrage of \$3 per day, or any part of a day thereafter; grain destined to points beyond Chicago, and so billed, will be delivered to connecting lines free of switching charges, but if held for inspection a charge of \$2 per car will be made; for switching to private tracks, warehouses, or elevators not on the tracks of receiving line, additional charges will be made according to location.

The San Francisco Grocer notices the fact that some years ago the wheat ocean freights of the Pacific coast had reached exorbitant figures, causing severe abuse of ship owners and contractors, and great sympathy with producers and holders. Now this state of things is reversed; there is a deficient wheat crop, and an excess in the supply of tonnage, so that ship owners and charterers are heavy losers, and producers and buyers are seizing the advantage. The Grocer considers this expression of sympathy with the one class, while none is shown toward those who had chartered vessels to arrive, an unreasoning sentimentality. The latter perform an exceedingly valuable service in supplying facilities for traffic to a vast section whose imports are light, and exports uncertain in quantity, and so distant from foreign markets

as to render the risks great as to obtaining remunerative returns. The recent opening of the Southern Pacific will probably prevent a return to the former high rates of wheat freights, but they will in turn doubtless again become higher; while it may well be doubted whether "the present demoralized condition of the ocean freight market is altogether an unmixed benefit." Assuredly mere sentiment should not govern the judgment of the public in the consideration of mercantile matters, or lead to a failure to appreciate their importance, and the risks they involve. But it is clear that transportation lines, managed by accumulated capital in a few hands with no route competition, did produce "exorbitant" freight rates, as is admitted. It is far more difficult for the numerous producers, scattered over a large territory, dependent on their grain for a livelihood, to meet by any methods of combination those transportation monopolies where there is little or no competition. In the long run popular sympathy is liable to be right.

At a meeting of the directors of the Chicago Board of Trade, on Jan. 22, the George A. Severance Warehouse and the George A. Weiss Elevator were temporarily made regular for the delivery of grain in them until May 1. The George A. Severance has a capacity of 600,000 bushels, and is for No. 2 corn only. The receipts are to be issued by George A. Severance, and the grain delivered through the Indiana Elevator. The George A. Weiss has a capacity of 25,000 bushels, and is regular for No. 2 barley and oats. The receipts are to be signed by and the grain issued through, the Chicago & Pacific Elevator. They are simply annexes to the respective elevators through which the grain will be delivered.

Legal Notes.

Securities Founded on Option Contracts.

Securities founded on contracts of sale where neither party contemplates a delivery are void.—*Lowry vs. Dillman, Wisconsin Supreme Court.*

Common Carrier.

A common carrier is liable for the full value of goods consumed by a fire which was due to its negligence, although the bill of lading stipulated that it should not be liable for a loss by fire, and, in no event, for more than a stipulated sum as damages.—*Seruggs vs. Railroad Company, United States Supreme Court, Eastern District of Missouri.*

Warehouse Insurance Policy.

The owners of a warehouse being indebted to the plaintiff, agreed to insure same against fire for his benefit, and accordingly agreed with the defendant for such insurance, in their names, with loss payable to the plaintiff. But by mistake the plaintiff's name was written in the policy as the assured and the owner of the property. A loss occurred within the period of the risk, and after proof of loss by the owners, and adjustment by the defendant, the former assigned the policy and their rights thereunder to the plaintiff. Held, that the equity of the case was with the plaintiff, and that he was entitled to have the contract reformed, according to the true understanding and purpose of the parties thereto.—*Spare vs. Home Mut. Ins. Co., U. S. Circuit Court, District of Oregon.*

Options in the United States Court.

In the case of Jas. B. White vs. Geo. M. Barber, before Judge Blodgett of the United States District Court of this city, the jury brought in a verdict on Feb. 7 in favor of defendant. This suit was brought to recover \$11,412.50 paid by plaintiff to Barber, as his agent on the Board of Trade, for margins, and security on sales during the July wheat corner of 1882, in which the broker was 100,000 bushels short on contracts for White. The latter, as was shown in evidence, approved of the tender of his agent of red winter in place of No. 2 spring wheat, and also of submitting the price to settlement by the Board of Trade arbitration committee. But not satisfied with the price fixed, \$1.35, White joined Wright and others in the chancery proceedings, which failed. In the present suit the plaintiff took the ground that these transactions were of the nature of gambling, and therefore legally void. Judge Blodgett in his charge quoted from decisions of the United States Supreme Court and that of Illinois in explaining the criminal code law. He said that time contracts for future delivery, made in good faith, were valid; but that those of the nature known as "puts" and "calls" were

gambling transactions and invalid. The judge referred to the recent decision of the Supreme Court of Illinois as sustaining the validity of the award of the Board of Trade settling committee, and this point was not, therefore, now before the jury. The latter, after considerable deliberation, sustained the legality of the contracts.

STAINED BARLEY.

A correspondent of the *American Cultivator* says there is no greater fraud practiced on farmers than the heavy deduction made by the purchaser of barley, if the grain is a little stained by exposure to the weather during harvest. He remarks:

"Barley is chiefly used for the brewing of beer and for the feeding of stock, and, also, when in the shape of malt, for distilling purposes. For feed it is ground, and when so prepared stained barley cannot be distinguished in its fattening properties from the brightest articles. It is a mere question of weight. Hogs and cattle do as well and fatten as quickly on stained barley as on that of the brightest samples; and for feeding purposes, even if the grain is a little germinated, it is but little the worse. Indeed, many farmers and housekeepers, in England and elsewhere, often cause the barley which they are going to feed to horses to grow nearly as much as if it was to be malted. Many believe such feed to be much more wholesome, and for some years past there has been a considerable clamor in England to allow farmers to feed malted grain to their stock, which, on account of the excise laws, could not otherwise be done. So much for feeding barley.

"When barley, however, is to be used for malting, it is another matter altogether. For malting purposes it is always treated as follows: It is first soaked in water for about thirty hours, the water being sometimes drawn off and fresh added; the water which comes off the grain is always high colored and has a most disagreeable smell, and any staining of the barley would pass off in this process. The grain is then put in an inclosure in a mass of about thirty inches deep, where it remains at rest until the rootlets begin to sprout and the grain to increase somewhat in heat. It is then removed to the floors and spread abroad in a mass of less and less thickness, until it has grown sufficiently for the malster's purpose. His object is to make it increase at the root but not at the sprout, which latter is never allowed to appear outside the husk of the grain. The sprout is only allowed to grow to about three-fourths of the length of the grain; it is then thrown on to the kiln and dried by fire heat. It requires to be watched night and day, and as soon as the heat of the floors arrives at a certain degree, it is turned and thrown abroad; this stops the heating, and completes the operation.

"In former years I worked many thousands of bushels of barley annually, and often paid a higher price for plump, slightly stained samples than for bright lots of a thinner quality. The yield and quality of beer is quite as good from a stained as from a bright sample of malt, and such stained samples malt equally well, provided no heating or germination has caused the stain. It therefore really comes to this—that the demand for an almost impossible quality of barley, so far as coloring is concerned, is caused by the purchaser of the barley wishing to reduce the quality to different grades, and thus reduce the general price unfairly.

"For many years I have had to do with two extensive malt houses, and I never saw stained and unstained parcels kept in different lots. All the barley that was fit for malting, and had grown on one kind of land, was put together and worked together. The beer made from stained barley is equally good and keeps equally well as the beer made from the bright samples. Why, therefore, should there be two prices, except for taking an unfair advantage of the farmer?"

ARE FREE CANALS A FAILURE?

The New York State Engineer and Surveyor has gotten himself into hot (canal) water by reason of the position assumed by him in his annual report, respecting free canals. His conclusion is that "the canals, as a successful and necessary means of transport, have outlived their usefulness, and that as between railroads and canals, when considered with reference to their relative merits as affording a means for rapid and economical transport, it must be regarded as a foregone, inevitable conclusion, that the canals must go."

Naturally these radical expressions have been met with an emphatic protest by the supporters of the no toll system. In the first place, it is shown that the business done this year was largely in excess of any other period in the past five years, although the season was thirty days shorter than that of last year. It is intimated by a canal officer that Mr. Seymour had too much personal interest in the railroads to make an unbiased report on the canals, and that he has been soured by his failure to be re-elected. New York merchants, too, have taken up the cudgels against the State Engineer. They hold, with good reason, that the influence which the canals have upon railroad transportation is of greater importance to the whole country than is the entire cost of the maintenance of the canals multiplied many times. On the other hand, they claim that, so far from returning to the toll system or abandoning the canals, the state should enlarge them at once, so that boats four times the present size can be employed. We are not sure but the merchants are in the right in this matter.—*Cleveland Trade Review.*

Items from Abroad.

The Liverpool grain merchants, John Herd, Jr., and William J. Mullins, charged with obtaining £16,000 by false pretenses, have been sentenced to imprisonment.

Looking at Russia from an Agricultural standpoint, its future is most unpromising. Little more than ten years ago the granary of the world, she now exports less wheat to Europe than does the United States, and has a formidable rival in Eastern India. The want of a market is impoverishing the farmers and diminishing the number of vessels visiting Russian ports, and both are having, as a consequence, a most disastrous effect upon the trade of villages and towns.

At the annual meeting of the Central and Associated Chambers of Commerce, held at London, England, Dec. 12, the following report relating to the Corn Sales Bill and the Corn Returns Act was passed: "The council at their March meeting confirmed their former resolutions in favor of the cental being the proper standard weight for the sale of corn, and approved the bill introduced by Mr. Rankin, which proposed to make its use compulsory. A petition in support of the bill was also agreed to, and the chairman and other members were present at a deputation on June 19, when the proposals of the bill were recommended to the favorable consideration of the president of the Board of Trade. The measure was, however, withdrawn for the session. At the May meeting of the council attention was again directed to the returns of the sales of corn officially made for the *Gazette* averages, and to the working of the Corn Returns Act of 1882. The council recognized, as a great improvement, the present arrangement of returning markets and the rectification of sales by weight, but regarded the opposition elicited to the return of re-sales as justifiable, and once more recorded their opinion that only the first sale from the producer should be returned for the purpose of the tithe rent charge."

The Laborers' Society of Galway, Ireland, has for some time past created difficulties in getting vessels discharged at the docks there, by the attempt to enforce its rules on the warehousemen. These rules forbid the use of the donkey engine for discharging cargoes; and no member of the society is allowed to work on a vessel using steam; and further, no member is to work on or alongside a vessel employing non-society men, under penalty of certain fines. About Christmas a stevedore, Joyce, employed to discharge a small steamer, was fined \$25, which he refused to pay. On New Year's day Messrs. Richardson Bros. & Co. received a large shipment of grain by steamer, whose captain employed this Joyce to act as stevedore, in consequence of which the society men refused to work. Joyce then employed outside laborers, when a number of the men in the employ of the firm refused to work, who were immediately dismissed, some of them having been in the employ of the house for years. All the society men in the employ of Messrs. Richardson then left the warehouse, refusing to work unless their dismissed comrades were re-employed. This was not done, however, but the steamer was satisfactorily discharged and a new staff of workmen employed, in spite of the foolish obstruction of these men and their arbitrary rules.

Among the grain-producing countries of the world the Argentine Republic is pretty certain to take a conspicuous place at no remote day. According to a recent report of the American Consul at Buenos Ayres immense possibilities of grain production exist there and already great development of this kind has been made in the Argentine Republic. The whole country contains 800,000,000 acres of land, of which only a very small portion is yet under cultivation, but the progress made in the past half-dozen years has been such, that instead of the country being a large importer of food products, there is already a considerable surplus exported. Thus in 1879 the shipments of wheat amounted to about one million bushels, and this year the exported surplus is estimated to be 10,000,000 bushels. The development is coincident with immigration and railroad extension in the two provinces of Buenos Ayres and Santa Fe, and considering that the population of the whole country is less than three millions, this is a singularly good showing. It seems hardly probable, however, that the present average yield of grain can be greatly exceeded for years yet, and the full development of the vast untouched resources must be still far off, though it is not to be overlooked that agricultural development in new countries now moves with infinitely greater rapidity than it did a generation ago.

The fact that British India has become a considerable exporter of wheat is an indication of the remarkable shifting in the world's granaries in modern times. Egypt was at one time a heavy producer of wheat. Under the Ptolemies and the Roman Governors she used to supply the markets of Italy, especially Rome, when it was almost as populous a city as London is now, and a failure of the Egyptian harvest was the signal for a great shortage of bread stuffs in the Empire. But agriculture was much better organized in Egypt than now, and the wheat production many fold greater. New routes of commerce have opened up new regions of supply, of which the Baltic states of Germany came in first, and Southern Russia next. For half a century or more Dantzic was the great wheat exporting city of the world, and it was felt as a severe blow to England when in 1806 Napoleon took that place and closed the port. For the next fifty years after the settlement of the Congress of

Vienna (1818 to 1868), Odessa held the foremost rank as an exporter of wheat. England up to 1865 looked to Dantzic and Odessa for her deficiency of bread supplies. But during the last twenty-five years the United States has outstripped these rivals, and notwithstanding the recent spurt of surplus from India, there is no ground for fear that that country will be able to supplant our product in the markets of Western Europe, owing to her dense and increasing population, her periodical drouths and famines, and her remoteness from the great dependent markets.

The Davidson Grain Separator, which is being exhibited at the Calcutta Exhibition, is described by the *Times* of India as follows: The "Phoenix" Grain and Seed Separator is an invention of an English miller. By means of a series of boxes the dirty grain is separated in large and small sizes, and from the dirt and small seeds which depreciate the wheat from 8 to 10 per cent. The boxes are practically sieves, and are aided in their action by a current of air from an exhaust fan. The results in cleaning the grain are said to be excellent. "However," says the writer, "the Indian cultivator may despise cleanliness, he will find that he must respect Western prejudices in its favor so long as he desires to exchange his products for Western goods or corn."

THE RIVER CONVENTION.

The Mississippi River Convention commenced its three days' session on the afternoon of Feb. 5, in Lincoln Hall, Washington, D. C. About five hundred delegates were in attendance, and the auditorium was divided up into sections by states and territories, of which eighteen were represented. Back of the platform was stretched a large canvas, on which was recorded the amount of the tonnage of the Mississippi River, with the statement added for the benefit of Congress, that, with an improved channel, this record would be increased 40 per cent. Mr. B. Wood, of New Orleans, Chairman of the Executive Committee, called the convention to order, and Secretary G. L. Wright read the call. A committee on a permanent organization, rules, etc., was appointed, representing each state. Commissioner West, of the District of Columbia, welcomed the delegates. After recess the following permanent officers, as reported by the committee, were unanimously elected:

President, E. O. Stanard, St. Louis; Vice-Presidents, C. C. Sheets, Alabama; John C. Calhoun, Arkansas; H. G. McPike, Illinois; M. A. Marks, Indiana; Gen. G. M. Dodge, Iowa; A. Y. Shoop, Kansas; George C. Waddill, Louisiana; H. C. Waite, Minnesota; John R. Lynch, Mississippi; the Hon. R. T. Van Horn, Missouri; the Hon. Frank Ransome, Nebraska; George H. Anderson, Pennsylvania; S. Colyer, Tennessee; John McLure, West Virginia; William Wilson, Wisconsin; James M. Freeman, Colorado, and J. H. King, Dakota. Secretary, George L. Wright, St. Louis. Assistant Secretaries, John W. Bryant, New Orleans; D. F. Wilcox, Illinois; S. L. McHenry, Pennsylvania, and C. A. Lounsbury, Dakota.

By resolution the privileges of the convention were extended to the members of the Ohio River Convention present. President Stanard addressed the convention with a statement of the objects of its meeting, and an earnest, lucid presentation of their importance to the nation. Based on the history of the past, he said that within the next fifty years our population would reach 110,000,000, whose commercial interests would be largely in these waterways, especially as equalizers of freight rates in competition with railroads. New York State has spent over \$70,000,000 on her canals to benefit her own residents; but this proposed improvement would directly benefit 50,000,000 people. Since the organization of the River Commission, Congress has placed at its disposal about \$6,000,000; and the President thought the only way to get adequate improvements for the Mississippi was through this Commission. Extracts were then read from the report of the Senate Special Committee, commending the work done on the river by government engineers; and special attention was called to the part relative to jetties as fresh and official. Resolutions were passed by acclamation favoring a continuance of the improvements now in progress; also thanking President Arthur for his two special messages to Congress, embodying broad and statesmanlike views on the subject.

The second day's proceedings were introduced by unfurling a large flag of the Union, according to resolution. Senator Logan and his colleagues of the Senate Committee were received by the delegates rising and loudly cheering. Quite a number of resolutions were offered and referred, and a large number of enthusiastic speeches were made on the principal and subsidiary enterprises. With the mild exception of some jealousy shown by delegates from St. Louis as to the proposed river and lake canal improvement, there was a remarkable unanimity in the views and feelings expressed relative to the plans already adopted, while the anticipated antagonism from the advocates of the "outlet" system seemed to find no voice. Among the resolutions proposed and referred were those embracing the following suggestions: Further improvements of the Tennessee River and Vicksburg harbor; the enactment of a law requiring bridges to be so located and constructed as not to endanger life and property; and to prevent obstruction of navigable waters by railroads; approving the plans made by United States engineer officers, and declaring that public work ought to be done by such officials, and that no work should be done by contract, and no convicts be employed on public works except on public roads. The others proposed are embraced in the comprehensive resolutions, finally adopted by acclamation.

tion. Those who represented the interests of the Henne pin Canal were jubilant over the results.

The resolutions were adopted on the third day, and were, in substance, as follows: The preamble set forth the nature and far-reaching importance of the work, representing an area of eighteen states and territories. The first resolution presents a recapitulation of the elements of the immense home and foreign commerce to be affected by these improvements, and the legitimacy of the exercise of the powers of Congress in their behalf. The three following resolutions contain the substance of the whole matter:

"2. We earnestly affirm the declaration of the River Improvement Convention, which met at St. Louis, October, 1881, that it is manifestly the imperative duty of the Government to cause to be made such improvement of the Mississippi River and its navigable tributaries as shall permanently secure the safe and easy navigation thereof. Especially is this duty obvious and our demand justified in view of the donations already made by Congress in land amounting to nearly 20,000,000 acres, and in bonds issued or guaranteed to nearly \$100,000,000 more, in aid of artificial highways, the property of individuals, and which even at the lowest rates must furnish the most costly form of transportation on a large scale, as compared with appropriations not yet so great as one-tenth in all for the improvement of more than 15,000 miles of natural waterways whose freedom from tax or monopoly is protected by constitutional guarantee, while by the cheaper service and unrestricted competition they afford a most efficient check on exorbitant charges by any other route to the sea.

"3. We also emphatically approve the appointment by Congress of the Mississippi River Commission as the first well considered and efficient step toward permanently opening the Mississippi Valley to the markets of the world. The work of the commission has passed out of the region of experiment, and has fully justified the expenditure made and the plans adopted for the improvement of the lower river. We specially approve their plan for preserving to the main river all the water of its tributaries, and for removing all obstructions, whether natural or artificial, which tend to deflect or draw off any portion of the same. We also declare that the system now being successfully prosecuted under direction of the Secretary of War for the improvement of the Upper Mississippi meets with general approval. In the judgment of this convention, said improvements ought to be continued under the same system, the general plan and jurisdiction, respectively, as at present. We also earnestly urge upon Congress that the scientific and comprehensive system of river improvement by a competent commission thus inaugurated as to the Mississippi should be applied without delay to complete the permanent improvement of the Missouri, Ohio, and other navigable rivers, and that true economy dictates that all such work be carried on by liberal and regular appropriations.

"4. That in the interest of cheap transportation, and to afford a choice of water routes to the seaboard, we regard the connections between the upper navigable waters of the Mississippi and the great lakes as of great importance, and that Congress in making the appropriations ought to have a regard to the establishment of free water communication between the valley of the great river West and tide-water East, in accordance with the recommendations heretofore made by the President of the United States in his special message on this subject."

In four more resolutions are embodied: The cordial appreciation of the services rendered in support of these improvements by the President of the United States; the wisdom of Congress in the appropriations and surveys already made for their advancement; the special benefits of the light-house system to the navigation of the river and its tributaries, and the hope that the number of districts and lights might be judiciously increased; the course of the Executive Committee was highly approved, and a desire expressed for its continuance until this great work had been satisfactorily completed; and that said committee be authorized to present to Congress a suitable memorial on this matter, and to publish and distribute the proceedings of the convention. A supplemental report stated that the resolutions offered relative to the dangers resulting from improper bridging of Western rivers had received thoughtful consideration. The Convention adjourned, subject to the call of the Executive Committee.

THE DAKOTA FARMERS' CONVENTION.

The Farmers' Convention met at Grand Forks, Dak., on the morning of Jan. 30, the attendance being limited to delegates, all of whom were present. The subject of the elevator grading of wheat was fully discussed. It was admitted that the books of the companies seemed to prove that the Minneapolis grading was liberal, but the facts, they claimed, show that these accounts are "cooked" and are incorrect. The wrong is charged upon the agents, who, it is said, act simply for their own advantage, swindling both employers and farmers. A resolution was unanimously adopted to the effect: That this Convention, being convinced that good reasons exist for these numerous complaints, request the elevator companies to inaugurate a system of checking their agents' books, in order to secure honesty in weighing and grading wheat at the points of shipment. This resolution was sustained by Maj. Flemming, and Judge West, Territorial Inspectors. The former thought this course wiser and more likely to be successful than litigations.

The permanent organization of a Farmers' Union was effected. The plan is to arrange County Unions through the State, whose delegates shall compose the central body; and steps for this purpose are to be taken at once. The general plan is similar to the old Grange, and its objects are the mutual protection and encouragement of the agricultural industry.

A LAKESIDE MUSING.

Oscar Redingote was Adelbert Mahaffy's adopted son. Years ago when Gwendolen was but a baby, and the proud father had gone out one evening for another bucket of soothing syrup to keep her from howling the roof of the house off, he had found Oscar, then a boy of seven, trying to rob a blind man. He had taken the little waif home, brought it up as his own child, and now, at five-and-twenty, Oscar was on the Board of Trade. He had resumed the old business.—*Chicago Tribune*.

Elevator and Grain News.

J. N. Iliff has sold his elevator at Jessup, Iowa.

A. M. Thompson, grain dealer at Worcester, Mass., has failed.

The grain elevator at Kasota, Minn., is closed for the winter.

S. Jo lin & Son, grain dealers at Spencer, Ind., have sold out.

Atkinson & Co., grain dealers at Jewell, Iowa, have sold out.

Thayer, Butters & Co. have sold their grain business at Ottawa, Ill.

George F. Kinsley, grain dealer at Fall River, Mass., has made an assignment.

John Wakelin, grain dealer at Valley Center, Mich., has sold out to C. Townsend.

A. J. Hare, grain dealer and warehouseman, of Decoto, Cal., has made an assignment.

George M. Whedon & Co., grain dealers at Stanley, N. Y., have made an assignment.

The firm of Routh & Baldrige, grain dealers, of Pittsburgh, Pa., have dissolved.

Brill, Conley & Co., grain dealers at Riley, Ind., have sold out to Robertson & Wilson.

Stockdale & Dietz, of Walcott, Iowa, have lately added a feed mill to their elevator.

Johnson's new mill and elevator at Milford, Neb., are completed and ready for business.

The Oconto Co. of Oconto, Wis., intend to build a large elevator near their flouring mill.

Meyers & Millsbaugh succeed J. W. Millsbaugh in the grain business at Shawneetown, Ill.

A new flouring mill and elevator will soon be erected at McPherson, Minn., by a stock company.

S. G. Richardson, grain and produce dealer, of Vicksburg, Mich., has sold out to Watson & Bliss.

Messrs Park Bros. & Co., grain dealers at Ada, Ohio, have sold their mill to Messrs. Hall & Liles.

The firm of C. G. Barth & Co., grain commission merchants, of Chicago, Ill., have dissolved partnership.

Two large elevators will be erected at Port Huron, Mich., in time for handling the next crop of wheat.

John Barr & Co. of Morris, Ill., grain dealers, have failed, with liabilities to the amount of about \$50,000.

H. C. Brown has withdrawn from the firm of Morse, Rogers & Co., grain and lumber dealers at North Bend, Neb.

Grain buyers at Mitchell, Dak., purchase grain of farmers, who in some instances haul it as far as sixty miles.

The new elevator at Glenwood, Minn., is in running order. This elevator was built by subscription of the citizens.

A grain dealer at Yankton, Dak., has bought 2,400 bushels of wheat since harvest of the Crow Creek Indians.

Tate & Trollinger, Mebanesville, N. C., are putting a fifty-horse power Westinghouse Engine into their flouring mill.

Ten round elevators will be erected at various points in Dakota in the spring by the Lenham Elevator and Lumber Co.

The firm of Butterfield & Hoyt, flour and grain dealers at Charleston, N. H., has dissolved. William A. Butterfield continues.

The mammoth elevator being built by the Canada Pacific Railway at Port Arthur, will be ready for storing grain in a few weeks.

Wm. Lane & Sons, grain commission merchants at Kansas City, Mo., have dissolved partnership, and the business is discontinued.

Roche & Sherwin, grain and provision commission dealers, of this city, have dissolved partnership. Each continues in the business.

Blake & Co., flour and grain commission dealers, of Baltimore, Md., have failed. The matter, it is said, has no commercial significance.

Purinton, Beaumont & Co., grist millers and grain dealers at Topsham, Me., have dissolved. Edward Beaumont continues the business.

G. W. Van Dusen & Co. are about to turn the elevator at Zumbrota, Minn., into a flouring mill, and are taking out the old engine to put in one of more power.

E. P. Bacon has retired from the firm of L. Everingham & Co., grain commission merchants, of this city. L. Everingham continues the business under the old style.

We were mistaken in our item last month about the dissolution of the partnership of Winchell & Butler, at Odebolt, Iowa. This firm was never in business at Odebolt, but at Schaller, Iowa. Winchell & Co. have been doing business at Odebolt, but rented their property on Jan. 1, to S. M. Thew & Co. Mr. F. A. Winchell of the

firm formerly did business at Odebolt, but left there in October, and built a 22,000-bushel Seeley Elevator at Kingsley, Plymouth Co., on the C. & N. W. R. R.

The Northwestern Grain Dealers' Association, of Minneapolis, Minn., intend to build elevators at Winnipeg, Emerson, Portage la Prairie, Neche and Brandon, Manitoba.

W. H. Squair, formerly in the "Assiniboine Mills," at Portage la Prairie, Manitoba, has taken a position as grain buyer and weigh-master in Elevator "A," at the same place.

The Saginaw Courier, of Saginaw, Mich., says that about 300,000 bushels of wheat were marketed in that city in 1883; a good showing for a new beginner in the wheat trade.

The Minnesota Elevator Co. are about building a road bridge across the Chippewa River at Durand, Wis. A charter has been assigned to the company and a bonus of \$3,000 subscribed.

Messrs. See'ey, Son & Co. of Fremont, Neb., are building a new 20,000-bushel elevator at Central City, Neb. Barnard & Leas' Corn Sheller, Cleaner and Warehouse Separator will be used.

J. B. & W. H. Anderson, grain dealers, millers, and bankers at Mendon, Mich., have failed. They had been in business sixteen years, and were considered solid. Their business was quite extensive.

John H. Trowbridge & Son, Albany, N. Y., flour and grain dealers, have made an assignment. Their assets are \$20,000; about equal to the preferences. The failure was due to the suspension of Coleman & Co. of New York.

The members of the Merchants' Exchange, of St. Louis, Mo., are discussing the question of changing the speculative grade of wheat in the St. Louis market, so as to embrace Turkey wheat, now being extensively raised in Kansas.

There was a large meeting of the Board of Trade of Erie, Pa., Feb. 11, for the purpose of memorializing Congress not to extend the steam grain-shovel patent, which was denounced as an additional embargo on lake commerce and the grain trade.

A firm at Arvilla, Dak., a station on the Manitoba, twenty-two miles west of the Red River, reports the purchase this season of 146,639 bushels of wheat, of which 124,873 graded as No. 1 hard, or all but 15,766. Of the latter amount 8,900 bushels inspected No. 1 and No. 2 hard.

W. E. Johnson & Co., coal dealers, of Chicago, Ill., have recently purchased from the Link-Belt Machinery Co. of this city a link-belt elevator for handling coal. The elevator picks up the coal from barrows and delivers it to a large storage bin, from which it is spouted to the wagons.

The Starch Works at Peoria, Ill., were recently sold to Dr. Firmich & Son, of Buffalo, N. Y., the consideration being \$200,000 worth of stock in the American Glucose Co. The purchasers intend to increase the works to four times their present capacity and employ 800 men. They will be started up at once.

G. W. Van Dusen & Co., grain dealers of Rochester, Minn., have issued circulars advising farmers to sow hard wheat instead of soft, as the latter is very hard to sell among millers, and tends to lower the grade. They have distributed the circulars among their agents all along the road, and will give them a wide circulation.

Wm. E. Bent, of St. Louis, architect and grain elevator builder of St. Louis, Mo., is now engaged in building a 250,000-bushel house for the Missouri Pacific R. R. Co., at Leavenworth, Kan. It will be a modern house, with large facilities for shelling and cleaning corn as well as wheat. It will have a handling capacity of 100 cars per day.

The line of elevators and grain warehouses recently purchased by Strong & Miller of H. D. Kellogg, Minneapolis, are located on the Hastings & Dakota division of the Milwaukee & St. Paul—Montevideo, Watson, Sacred Heart, Renville, Buffalo Lake, Norwood, Oliva and Granite Falls. Mr. Strong, of the purchasing firm, is now inspecting the elevators, with a view of ascertaining their total capacity.

The failure of B. Blake & Co., grain and flour merchants at Baltimore, Md., was announced on 'Change there on Feb. 4. They made an assignment without preference to Edward M. Schryver, giving him \$15,000 in cash and wheat. Their options for from 70,000 to 80,000 bushels of wheat were closed out during the day. Their liabilities were estimated at \$20,000, and it is expected that they will be able to pay fifty cents on the dollar.

Charles Kaestner & Co. of Chicago, Ill., have shipped to the Detroit White Lead Works two Improved Water-Cooled Paint Mills and Mixers. They are building for Hays & Calihan, of this city, a new improved device for elevating sand from the lake, and for screening and loading same by machinery. The above firm have also furnished machinery to the following parties: To N. W. Hoag, Delaware, Wis., a No. 20 Kaestner Patent Grist Mill; to Geo. B. Tateman & Co., Benton Harbor, Mich., a No. 24 Kaestner Mill; to Muskegon Brewing Co., a new Kaestner Patent Mashing Machine and improved grinding machinery; to Todd & Stanley Mill Furnishing Co., St. Louis, Mo., a lot of Kaestner Fire Proof Elevator Boats; to L. M. Rumsey Mfg. Co., St. Louis, Mo., a No. 30 Kaestner Mill; to Heller & Talmage, proprietors of the National Spice Mills, a complete outfit for manufacturing, including engine, boiler, roasting

and grinding machinery, etc.; to Phoenix Distilling Co., of this city, four Osterlein Patent Friction Clutches; to Bailey & Seamans, Rawhide Butte, Wyoming, one of Gates' Patent Pulverizers.

According to the statement of Mr. Pillsbury, the following are the amounts of wheat and per cent. of grade at the stations named for 1882 and 1883: Harwood, 1882, 104,000 bushels, 1883, 152,000 bushels, No. 1 hard, 90 per cent.; Gardner, No. 1 hard, 90 per cent.; Manvel, 1882, 52,000, 1883, 70,000, No. 1 hard, 92 per cent.; Ardoch, 1882, 68,000, 1883, 146,000; Ojata, 1882, 62,000, 1883, 78,000, No. 1 hard, 85 per cent.; Norton, 1882, 74,000, 1883, 98,000, No. 1 hard, 91 per cent.; East Grand Forks, 1882, 112,000, 1883, 98,000, No. 1 hard, 85 per cent.; Grand Forks, 1882, 62,000, 1883, 44,508, No. 1 hard, 63½ per cent.—Grand Forks Herald.

The affairs of the firm of H. S. Gilbert & Co., grain and commission men at Ottawa, Ill., reported a few weeks since as in an uncertain state, have been entirely settled, and the firm has resumed business, having repurchased from J. Iver Montgomery, into whose hands it passed at time of judgments. The new firm is composed of Mr. Gilbert, of the old firm, and E. J. Manchester, late of Mendota. The retiring members are Messrs. Parker and Scott. The warehouses of the firm will be continued at Ottawa, South Ottawa, Grand Ridge, Wedron, Buffalo Rock and Utica. Mr. Manchester continues his interest in the warehouses at Henry and Hennepin, operated under the firm name of Eriswood & Co.

The committee of the Farmers' Convention met the merchants of St. Paul on Feb. 9, and adopted the following resolutions: 1. We demand an immediate revision of the system of elevators upon the Manitoba Road. 2. That we most earnestly recommend the system in practice by Mr. Sawyer, of Duluth. 3. That it is the earnest desire of this committee that the St. Paul, Minneapolis & Manitoba Railway Company at once take upon itself the same supervision of its elevator system as is in vogue by the Chicago & Northwestern Railway, viz., exact that the elevator companies shall each day report to the general officers the price they are paying at each elevator and the price of wheat the same day at the market reached by this line, and to exact that price; there shall be a difference of not more than five cents less (exclusive of freight charge) than the market so patronized, and as a check have local railroad freight agents report daily the prices paid farmers at their respective stations. The above resolutions were duly discussed, some opposition being shown toward the principle of indorsing any one particular elevator system. It was said in the talk that the elevator men protect themselves, and that in the case of Mr. Sawyer he was acting for his own benefit, while at the same time his system had in it commendable features, worthy of the attention of the committee. But there is no protection for the farmers in the matter of grading, which is for the Legislature to determine and settle. On motion it was resolved to refer these resolutions for amendment to a committee of three, to be named by the chair. The following gentlemen were named: F. L. Dana, of Ramsey; Geo. P. Harvey, of Walsh, and Geo. B. Winship, of Grand Forks Counties. The committee then left for Minneapolis to inspect the elevators there.

CATECHISM OF THE BOARD.—What is a Bull?—A bull is a person who talks much of the prosperity of the country, the vast earning capacities of the railroads, the big crops out West, and then eats a ten-cent sandwich for dinner.

What is a Bear?—A bear is a person who talks much of the depression of the iron trade, over production, too many railroads, and that everything must go to smash. In the evening he occupies a front seat in the crack theater of the town.

What is a Broker?—A broker is one who, in consideration of a certain commission, properly sees to it that you "go broke."

What is a Put?—A put is an instrument in writing which secures to you the right of putting your money where you will never see it again.

What is a Call?—A call is an instrument of torture benevolently issued by a capitalist. The profits you thought you would make generally begin after it has expired. Brokers sometimes accept them as margins.

What is a Margin?—A margin is a sum of money put up on your deal. It has a patent right for always growing smaller, and is related by marriage to a stop-order.

What is a Stop Order?—A stop order is an electric machine used in firing you out of the market.—Wall Street News.

NO PARTNERSHIP.—A bull who had been roaming around the country for several years, tossing up every object he could get his horns under, one day met a bear, and said:

"See here, stranger, why can't you and I live on better terms?"

"How?"

"Why, let us travel together and whack up the profits. You don't seem to be such a bad fellow, and I know there's nothing mean about me."

"My dear sir," softly replied the bear, as he brushed the fly off his nose, "did we enter into partnership there would be no profits. As it is, a toss is followed by a squeeze, and vice versa. Did we both attack the same victim at once we should certainly quarrel and give him a chance to escape."

"That's so—that's so," mused the bull, and he lifted Wabash a point and bellowed to the bear to look out for the tumble.—Wall Street News.

THE NATIONAL BOARD OF TRADE.

The National Board of Trade held its first important business session on Jan. 26. The first subject considered was the improvement of the Columbia and Willamette Rivers in Oregon. Mr. Dodd, a merchant of Portland, who had come East especially in the interest of this improvement, stated that the merchants of Portland had expended within a few years \$400,000, against an expenditure by Government of only \$100,000. A resolution was adopted recommending a liberal appropriation by Congress to this work. The various Eastern Boards of Trade presented several propositions in reference to a national bankrupt law. A resolution, after free discussion, was adopted, urging the attention of Congress to this subject, and recommending the passage of an act embodying the principles of the Lowell bill. The principal discussion of the day was upon the resolution of the Chicago Board of Trade, in reference to canals, which read as follows:

Resolved, That the enlargement of the Illinois & Michigan Canal and the construction of the Hennepin Canal, connecting the Illinois and Mississippi Rivers, as by survey recently made by the Secretary of War, are necessary to control and materially reduce the cost of transportation from the fields of production to the great lakes, and that the cheapest possible transport from the interior to the seaboard is indispensable to the retention of foreign markets for our cereals.

A large number of speeches were made, all favorable excepting two, by Mr. Strahan, of New York, and Mr. Parsons, of Detroit. The latter was, however, converted by the address of Mr. J. C. Dore, of Chicago, which was the speech of the occasion, and finally voted for the resolution.

Mr. Dore stated that two bills were now pending before Congress, asking for appropriations to these canals. The estimated cost of the construction of the Hennepin Canal was \$6,673,000, including feeders and right of way; and of the enlargement of the Illinois and Michigan Canal was \$2,299,000 for a channel of the same dimensions, viz., eighty feet surface width and ten feet depth, which is ten feet wider than the Erie Canal, and of equal depth. These improvements would complete a free waterway from St. Paul to New York, a distance of 2,000 miles. These improvements are shown to be of a national character from the large number of states west of the Mississippi directly interested in them; while as to Illinois alone, not more than one-twentieth part of her territory would be tributary to these canals. In 1872 a senate committee reported that the Hennepin Canal would save in one year an excess over its cost of \$1,260,000. The average estimated freight charges were 8 6-10 cents per bushel less by canal than rail, or one-half the latter. The entire cost is estimated at less than \$9,000,000. New England and New York, on the basis of one cent per bushel saving, would each save annually \$450,000, or \$150,000 more than the interest on the entire cost of construction. The enlarged facilities of grain transportation on the lakes the last twelve years, and the freedom from tolls on the Erie Canal, have each reduced grain shipping charges six cents per bushel. This twelve cents per bushel reduction to the seaboard is what has enabled our cereals to control the markets of Great Britain and Western Europe. The charges by rail are everywhere, except when in direct competition, double that by water. Great Britain now takes cargoes of wheat from Cawnpore, 900 miles up the Ganges, to Liverpool or London, via Suez Canal, without breaking bulk; and the facilities in the latter are soon to be greatly increased and cheapened by enlarging the present or constructing a new canal.

Mr. Geo. H. Sidwell, of Chicago, emphasized the importance of these references to foreign competition in the grain trade by additional statements as to the work of the British Government in India, in increasing transportation facilities; and also that of Russia in rapidly extending her rail and waterways around Odessa for the benefit of this traffic. He argued that it is necessary for the American Government to afford, as far as practicable, cheap transportation for the coarse grains to European markets, in order to compete with other grain-growing countries; and that the construction of these canals would be a benefit to the whole country, and not simply to one section.

Mr. Murry Nelson briefly replied to an objection made by Mr. Buchanan, of New Jersey, that this Western competition would work a detriment to the grain-growers of that state by cheapening the price of grain in the East. Mr. Nelson, while admitting this fact, said that while the Western farms were devoted almost exclusively to the production of grain, the Jersey farmers had generally given up this cultivation, and had turned their attention to fruit, dairy products, and garden luxuries, while their cattle and hogs were chiefly fed on the grain products of the West. The resolution was adopted, with only one vote in opposition.

The session of the 26th was devoted mainly to the discussion of foreign prohibition of American pork. As the hog is supplied with the most intricate, improved machinery for manufacturing corn into its concentrated product, pork, this animal is a most important factor in the grain market, affecting the demand and price of the most extensively grown of our cereals, corn, more perhaps than any other one. A long and spirited debate developed the facts of the case and the injustice of this prohibitory action, and led to the adoption of resolutions embodying most of the features of the Dingley bill. While these resolutions look to the adoption of retaliatory legislation, nothing is specifically recommended. The following are the resolutions as adopted:

WHEREAS, Certain foreign countries, by legislation and edicts, have prohibited unconditionally the importation of American pork products, on the misrepresentation that the same are unwholesome and diseased; and

WHEREAS, The general consumption of and the most rigid and

scientific inspection of American pork products in England and in this and other countries have demonstrated the absolute wholesomeness and soundness of said products; and

WHEREAS, Such prohibitory acts are a most serious blow to our farming and manufacturing interests, and equally an injury to our commercial and financial prosperity; therefore

Resolved, That the National Board of Trade respectfully requests Congress to take prompt action with a view to the removal of the unjust discrimination now referred to, and which we believe to be in violation of the spirit of treaty obligations.

DULUTH AS A GRAIN CENTER.

The *Duluth Tribune* presented its patrons, on the opening of the new year, with a review of the growth and development of the "Zenith City." From a population of 2,500 in 1875, it has grown in eight years to be a city of 17,000, with commercial facilities, naturally excellent, rapidly extending in all directions. In the sharp competition for the grain traffic of the Northwest, Duluth is much nearer to those vast and rapidly extending fields of production than Minneapolis, as is shown by its regular shipments of wheat to the latter port for milling purposes. Relatively to the East and the seaboard ports, the *Tribune* claims that this city has 300 miles the advantage over its rival, who must ship her grain and flour over an expensive railway system to Chicago, at which point it is still equally distant from the Eastern markets. While Chicago stands at the head of Lake Michigan, Duluth occupies an equally advantageous commercial position at the head of a much larger lake, and nearer by hundreds of miles to their common sources of supply in the West. The statement is also renewed as to the increasing milling competition of Buffalo and Rochester with Minneapolis, at which points, it is claimed, the manufacture of flour can be carried on less expensively.

"The grain trade of Duluth," says the writer, "is yet in its infancy." Her total elevator capacity during the year just passed was 2,750,000 bushels, which will be increased in time for the crops of the new year to 5,500,000, by the completion of three new elevators, already in progress. The present elevators of Duluth are as follows: Lake Superior Elevator Co.'s Elevator "B," with a capacity of 1,000,000 bushels, and storehouse "C," of 1,100,000 bushels capacity. The total receipts of this company in 1883 were 5,923,138, and total shipments were 4,685,926 bushels. The Union Improvement and Elevator Co.'s Elevator "A" has a capacity of 650,000 bushels. Its total receipts of wheat during 1883 were 1,713,240, and its shipments 1,605,916 bushels. The latter house during the same period received 422,884 bushels of corn, and shipped the same amount. The aggregate of wheat receipts at this port last year were 7,638,378, an increase over those of 1882 of 3,437,245 bushels. The total shipments of wheat were 6,291,843, an increase over 1882 of 3,746,913 bushels. The new elevators in process of erection are: One of 1,100,000 bushels capacity by the first named company; one of 1,000,000 bushels capacity by the owners of Elevator "A," and a house of 550,000 bushels capacity by the Duluth & Western Elevator Co. Beside the above, Davis and Caffed built last season a large oat elevator and wheat cleaner, at a cost of \$12,000, which are in successful operation. Noting the fact that the wheat receipts of Duluth in 1883 nearly equaled those of Milwaukee in 1882, a table is presented of the wheat receipts of the latter city as compared with those of Chicago during the period since the first reports were made, up to 1882, inclusive. The figures were obtained from the Chamber of Commerce and the Board of Trade of the two cities respectively:

Years.	Milwaukee.	Chicago.
1853		1,687,465
1854		3,038,955
1855		7,535,097
1856		8,767,790
1857		10,554,761
1858	4,876,171	9,639,614
1859	5,580,681	8,000,766
1860	11,048,458	14,927,083
1861	15,390,706	17,385,002
1862	15,630,095	13,978,116
1863	13,485,419	11,408,161
1864	9,147,274	12,184,977
1865	9,043,659	9,266,410
1866	12,777,557	11,978,753
1867	12,523,464	13,695,244
1868	12,760,578	14,772,094
1869	17,745,238	16,876,700
1870	18,383,837	17,394,409
1871	15,686,611	14,439,653
1872	13,618,959	12,724,141
1873	28,457,937	26,266,562
1874	25,628,143	29,764,622
1875	27,878,727	24,206,370
1876	18,174,817	16,574,038
1877	19,814,949	14,164,515
1878	21,763,312	20,713,577
1879	19,649,352	34,106,109
1880	11,756,463	23,541,607
1881	10,176,098	14,824,990
1882	8,058,422	23,008,596

SHE HAD TO DO IT.—The other day, when old Pungle, the grain merchant, went home to lunch he was surprised to find an unusual number of wet umbrellas on the rack, so he ascended to his wife's room, and said:

"Anybody in the parlor, my dear?"

"Yes, dearest," replied his better half, who was putting the finishing touches to an elaborate toilet. "Yes, dearest; quite a lot of people. There's the doctor, an expressman, a hackman, a grocery clerk, a telegraph repairer, and nine messengers in the parlor."

"What on earth are they here for?"

"Well, you see, love, my new plush and rep princesses came home five days ago, and it has been doing nothing but rain ever since. I've stood it just as long as I could, and so when it rained again to-day I just rang for everybody on the telegraph indicator, so I could have some-

body to show it to. Isn't it too lovely for anything!" and with an expectant smile she rustled down stairs.

And old P. didn't sit and write to the Lunacy Commissioners. He had been married before, old P. had.

AN INTERESTING REPORT ON BALTIMORE'S GRAIN TRADE.

The annual meeting of the Corn and Flour Exchange, of Baltimore, Md., was held on Jan. 28. The president, Geo. H. Baer, read the report of the Board of Directors for the year. Mr. Baer referred to the general depression of business throughout the country during the past year, there being a reaction from the prosperous period immediately following specie resumption. Manufactures, and especially railroad extension, have been overdone, the latter, since 1879, having been only equaled in the flush times preceding the panic year of 1873. Our markets have been glutted with manufactured articles, while the production of cereals has held its fair average, and we have had our usual surplus of wheat and corn for export. Similar conditions at the same time existed in consuming countries, and Europe has been able to supply her demands at prices lower than this country was willing to accept. Our annual surplus of wheat and flour, estimated as wheat, is 150,000,000 bushels, and our visible supply of wheat at the opening of the year was larger than ever before. This condition of things, accompanied with the dangers of manipulations and speculative combinations, is a matter of serious import, and has engaged the thoughtful consideration of political economists and statesmen, as well as of producers and dealers.

The president congratulates the Exchange, notwithstanding this unfavorable outlook and its increased expenses in occupying its present large and convenient quarters, on its prosperous condition. All demands upon the treasury have been promptly met, and besides investing \$100,000 in the Chamber of Commerce Building Association, the Exchange has rentals, loans, etc., yielding \$7,250 annually, not including the \$1,700 stock in old building, at present non-productive.

The report states that the inspection department is thoroughly organized, and that no inspection stands higher at home and abroad than that of Baltimore. The elevator superintendents are specially complimented on their watchful care as to the grain stored in their respective houses, and it is due to their vigilance and prudence that from the entry of the first car load of grain to the present time, with the exception of a small car load of corn in Canton, not a bushel of grain has been posted in the elevators there, while during this very month of January, one million bushels of wheat have been posted in New York, depreciating the value of grain intrusted to the care of that port, and discrediting the character of American wheat in all the world's markets. The summary of the year's business, though not as flattering as that of some former years, owing to the partial failure of winter wheat in the sections tributary to Baltimore, shows that port to have received, within 900,000 bushels, as much wheat last year as in 1882; while the receipts of New York, in the same periods compared, showed a falling off of 17,000,000 bushels.

The new up-town elevator of the Baltimore & Ohio Railroad Co. at Camden has been completed and will meet a long-felt need in handling grain not destined for ocean shipment. More ample storage capacity, the report says, is required at Canton. In spite of the energy of the elevator company's officials, cars loaded with grain were frequently, during the year, kept on track a week or ten days, and several millions more of grain might have been received by the N. C. R. R. had the storage room been adequate. The fact is noted that the Northern Central Road, during 1883, brought several million bushels more grain than did the Baltimore & Ohio, the special trunk line of that port. In view of the splendid terminal facilities of the latter at Locust Point, its Western connections, and interests identified with those of Baltimore, this unfavorable comparison with its great rival, whose Eastern terminus is not in that city, is considered a matter of surprise. The attention of the former road is called to the advisability of increasing the facilities of its lake route, via Sandusky, and thus in some measure counteract the advantages of the free Erie Canal. The differential rate of three cents per hundred pounds, allowed on grain by the trunk line pool to Baltimore, it is stated, has not been rigidly adhered to. The board has pledged to the president of the B & O. Railroad the earnest support of the members of the Exchange in his determined efforts to secure to Baltimore a part at least of the advantage of her geographical position. New York is not backward in seizing every advantage of canal, river, and lake, and this small differential rate so reluctantly conceded is not one-half, says the report, of that to which this port is justly entitled, and the Exchange look to this great trunk line to protect the interest of the trade of that city, even at the risk of a much dreaded railroad war.

The reading of the report was followed by the election of a new board of directors, which after a spirited contest, resulted in the election of the following members: Geo. T. Kenly, Geo. H. Baer, Robert S. Fowler, James E. Tate, T. Burling Hull, Samuel E. George, John Gill, E. M. Shryver, Henry A. Parr, Thomas H. Levering, Samuel P. Thompson, Samuel G. Crocker, J. N. Gilbert, Joseph D. Small and George H. Pistel.

It is said that some of the farmers of Shakopee, Minn., received seventeen cents per bushel more for their wheat at Minneapolis than local buyers were paying.

Editorial Mention.

W. H. AUSTIN, of Franklin, Neb., in subscribing, writes: "Cheap at twice the money."

In spite of the shortness of the corn crop, and its poor quality, corn does not seem a favorite article of speculation.

THE large falling off in wheat exports the last year were largely compensated by the increase of flour exports over 1882.

THE Canadian millers have so far been unsuccessful in getting the Canadian tariff on wheat lowered to suit their ideas.

THE directors of the Baltimore Corn and Flour Exchange have protested against the extension of the steam grain-shovel patents.

It would seem that at last the Hennepin Canal is "a go." "No pent up Utica confines our powers; but the whole boundless continent is ours."

It is strongly hinted that the people in the grain inspector's department have been assessed to forward the political aspirations of Gov. Hamilton.

A COUPLE of very flattering testimonials to the merits of machinery made by the Barnard & Leas Mfg. Co., Moline, Ill., are printed in another column.

CHICAGO now has in store the enormous amount of nearly 23,000,000 bushels of grain, being about one-half of the visible supply of the whole country.

It cannot but be apparent that the people are determined, by the increase of water facilities, to provide themselves with regulators of railway charges.

THE elevators in Cincinnati were in considerable danger, at one time, of being flooded, which would have proved disastrous, as they were full of grain.

MR. HILL, of the Manitoba Road, denies that any of the shippers of grain over his road are given rebates, and declares that all shippers pay the same rates.

MESSES. DEAN BROTHERS, of Indianapolis, Ind., makers of a well-known and complete line of steam pumps, send us a neat catalogue just issued from the press.

DR. FIRMINICH, of Buffalo, the well-known scientist and manufacturer, proposes to make whisky out of starch refuse, and whisky men are excited in consequence.

CANADA, it is estimated, will require 10,000,000 bushels of American wheat before the next harvest. One Canadian miller is taking 10,000 bushels weekly from Chicago.

THE New York World does not think highly of the new Metropolitan Theater in that city. It says it can be used as a grain elevator when entertainments are not being given.

THE legislature of Massachusetts has been petitioned to protect shippers against some of the irresponsible rogues who have of late infested Boston and beguiled parties into making consignments to them.

MESSES. SEELEY, SON & Co. of Fremont, Neb., write us that everything indicates an active season in elevator building, and that such parties as know they want Seeley Elevators should make arrangements for them early; for later on, some of those who want them may have to possess their souls in patience.

THE committee of the House of Representatives will, it is thought, report favorably a bill to empower the Postmaster General to exclude the "bucket shops" from the use of the mails, as well as the lottery companies.

MESSES. JOHNSON & FIELD, of Racine, Wis., have issued a neat lithographed circular of their Racine Dustless Separator, in which we notice some strong testimonials to the merits of the machine from prominent elevator owners.

It seems that the project of the Russo-American company for building grain elevators in Russia, has not yet become a fixed fact, for we read that the Imperial Council will soon consider the advisability of forming such a company.

THE sympathy of the Milwaukee millers for the hard wheat farmers is possibly tinged with more or less revengeful feeling against their Northwestern competitors, who persistently refuse to allow any considerable quantity of hard wheat to pass their mill doors.

THE grain, flour, and whisky men of Terre Haute, Ind., object to the plan of organizing a Board of Trade in that city, which will leave out grain and flour quotations. They say that unless market reports are received they will form a grain and flour exchange of their own.

THERE is a movement among the members of the Chicago Board of Trade to defer moving into the new Chamber of Commerce until May, 1885. The new building will be completed next October, but it is thought that the office accommodations in that locality will be insufficient at that time, while, at the same time, the leases of nearly all offices run from May to May.

IN the district court at Keokuk, Iowa, on Feb. 4, the case of the state of Iowa vs. W. N. Sturgis was dismissed, Francis J. Kennett, of Chicago, the chief witness for the prosecution, failing to appear. Sturgis, as the reader will doubtless remember, had been indicted for making way with 100,000 bushels of corn in the Keokuk Elevator, upon which Kennett & Co. had made advances. It would seem from Kennett's failure to appear that he and Sturgis had arranged their differences amicably.

THE *Wall Street News* says: "Railroads carrying grain from Chicago to New York at the actual cost of transport, and in some cases less, is not material for a bull market. This is done in the winter, when these roads ought to be making their harvest of earnings. Every ship and canal boat at Chicago is loaded with grain; and as soon as the season of navigation opens, the water-ways will be crowded with boats. What are likely to be the railroad rates and earnings then?"

MR. W. G. ADAMS has purchased of the Sandwich Mfg. Co., Sandwich, Ill., their department of Grain Elevator and Warehouse Machinery and Supplies, and is now conducting that branch of the business in his own name. Mr. Adams has had entire charge of this department for some time past, and all plans, estimates, etc., have been made by him. Mr. Adams continues the business on an enlarged scale, and possesses that familiarity with the requirements of the trade which will command success. A neat card advertising Mr. Adams' business will be found in this issue.

THE Chicago receipts of corn during the last three months were 25,200 car loads, against 26,832 in the same period of 1882-3, and a considerable accumulation has unexpectedly taken place in our warehouses. Kansas, although her corn has been broadly distributed West, and in some states East, has, it is said, still a surplus far from being exhausted. But this is about the only corn that furnishes the speculative grades of our market, while the poor quality and the danger of souring has led to the rapid disposal of other corn generally as feed for cattle, swine, etc., while the quantity put up in cribs for shipment next summer

is far less than usual, the risks of keeping being too great to justify advances. Much the largest part still unmarketed is in a precarious condition, and Chicago, it is said, will be fortunate if it escapes "hot corn" next spring and summer.

THE JOHN HUTCHISON MFG. CO., of Jackson, Mich., have very recently moved into their new and more commodious quarters in that city. This concern manufactures the well-known Hutchison Dustless Iron Corn Sheller, and have now also embarked in a general mill furnishing business, for which purpose they have put in a full line of mill furnishing goods. They have added a number of new and improved machines to their works which will increase their capacity. Their works and store-rooms are located on the corner of Francis and Washington streets, Jackson, where they will be pleased to meet their friends and patrons.

A FEW days since Mr. Geo. H. Sidwell, who has served on the Board of Trade Committee of Appeals on the Inspection of Grain, resigned his position, owing to a pressure of outside business. The influence of a large majority of the grain receivers overcame his objections, and an authorized communication withdrawing his resignation was sent to Springfield. A reply was received that the withdrawal came too late, and that Mr. Thaddeus H. Sears had already been appointed. The appointment of Mr. Sears was not received with good grace by most of the members, whose second choice, in case of Mr. Sidwell's resignation, was Mr. A. L. Parker, the assistant grain inspector.

ON Feb. 4 Mr. Charles Randolph tendered his resignation, which was accepted, as Secretary of the Chicago Board of Trade. Mr. Randolph had been re-elected by the Directors on Jan. 22. The resignation is to take effect on March 1. The reason for Mr. Randolph's taking this course was the appointment of an assistant secretary without consulting him. Mr. Randolph considered himself aggrieved by this action, as he is responsible for the acts of his assistant. Among the candidates for the position to be vacated by Mr. Randolph are Mr. Theodore Gurney, now city controller; P. Byrd Price, formerly chief grain inspector; Geo. F. Stone, the new assistant secretary; and Henry C. Ranney. The place is worth \$8,000 a year.

THE committee of the Grand Forks farmers, after listening to the report at St. Paul, of the sub-committee sent to Minneapolis to investigate the railway tariff question, admitted that the result was somewhat surprising. Considering the greater cost of operating the Manitoba Road, compared with that of other Northwestern roads, they believed the present rates to be fair and reasonable. A report to this effect will be presented to the people of the Red River Valley. The members of the committee visited the office of the Manitoba Road at St. Paul and met Mr. Hill, who said that the company were willing to do anything in their power to make matters right. The company would, if considered to be the only relief, permit the erection of small elevators, but he preferred a minimum placed at 15,000 bushels. He, however, agreed to the erection of 5,000-bushel warehouses if the people insisted, and promised that a reduction of freight rates should be given next year.

A RURAL grain firm at Atlanta, Ill., having lost quite largely in their speculative ventures on corn on the Chicago Board of Trade, in the summer of 1881, have appeared the second time before the courts in suits vs. their brokers, Messrs. Bensley & Wagner, in order to escape the payment of losses. In July, 1881, these sharp country dealers, estimating the growing crop, thought 45 cents too high, and ordered the sale of 5,000 bushels; this was followed up by orders until their sales aggregated 45,000 bushels, while prices by Aug. 19 had climbed to 64 cents. Their margins having given out, the brokers closed the deal at about 64½ cents. They hereupon grumbled that due notice had not been given, and the brokers offered to put them back at the market

price, 63 cents, and deduct commissions. This was accepted, and the firm hastened to sell 50,000 bushels, but corn went skyward in a month to 68 cents. The order now came from the rural dealers to buy 50,000 bushels of this "cheap" corn. This was done, and the deals closed out at a loss of \$5,587 on the first sales, and \$2,206 on the last deal. Reflection decided the country firm that the losses were somehow due to the brokers, that due notice was not given, and they brought suit for the first loss named. The verdict in the trial before Judge Gary was adverse to the plaintiffs. The recent suit before Judge Rogers was for the last loss of \$2,206, based on the claim that their margins were not exhausted, and that they had not given orders to buy. The jury gave the plaintiffs a verdict for \$206.

An option deal in hops, recently tried before Judge Blodgett, in the United States Court of this city, was declared by the jury void. The suit was brought by W. S. Grubb against W. W. Watkins, on a contract made Aug. 4, 1883, in which the plaintiff agreed to pay defendant \$100 for the privilege of buying of him 100 bales of new hops, to be delivered at his store on or before Jan. 1, 1883. The price was to be fifty cents a pound if the hops were accepted, or the above forfeit. The case was on a demurrer to the plea, and the jury held that as there was no obligation to take the grain, but simply an agreement which gave plaintiff an option to buy or not, the contract was a mere bet of \$100 as to future prices; the demurrer to the plea was therefore overruled.

Mr. WM. HARRIS recently laid before the British Fair Trade League statistics going to show that the average wheat production of the world exceeds its consumption as a breadstuff by at least 80,000,000 bushels. In view of this the *British Farmer* says: "We cannot go on storing away a thousand million quarter loaves per annum. Under the continuance of such attempts the market may be expected to be reduced below a remunerative level. Either production will have to be decreased, as in case of coal, cotton, iron, etc., or else wheat will have to be used for feed, which will hardly be likely to be done in the face of the competition with cheaper grains." The final conclusion must be, says the *Farmer*, that wheat production will have to call a halt and wait for increased population to overtake it.

THE grain business has its perils. A story briefly told in the dispatches to the daily press shows how one good firm went under. "They saw, or thought they saw, a good field for handling grain in Detroit, and formed a separate partnership with a man here as silent partner, and bought corn extensively during the fall in Peoria and Kansas City, selling in Detroit, Montreal, and Liverpool, and also dealt in other grains. They worked on advances from Detroit banks, using shipping bills as collateral. Their operations were very successful till along in the winter, when corn graded to them as No. 2 began arriving in bad condition, the result of mixing with soft corn. Over 60 per cent. of shipments, aggregating 500,000 bushels, arrived in bad condition. Not having capital to carry the business till they could get straightened around, they were obliged to assign."

GREAT failures, rapidly succeeding each other, are reported by the German press as occurring at Odessa, Kieff, Warsaw and various places in Western Russia, indicating a crisis in the Russian export trade. The cause is said not to be over-speculation, or the ordinary course of trade, but is attributed to the Russian railway policy. The railway competition between the two terminal points of Libau and Königsburg has led to successive reductions in freight rates, amounting to nearly 100 per cent. in the last two years. The land export trade to the important markets of Central Europe, especially Germany, has been thus seriously injured; while grain has accumulated at points leading to the Mediterranean, French and English ports, where it meets active American competition, and a stock of 9,000,000 bushels of

wheat is in consequence, now piled up at Odessa. Prices have been depressed also on account of the quality of the wheat, although the harvest was good in quantity, and the supply of the finer grades required by the markets of Western Europe is thus relatively small.

THE Committee on Patents of the National House of Representatives has decided to recommend the extension of the steam shovel patent. Speaking of the patent and its owners, the *Tribune* of this city says: "All that they have so made has been taken from the price realized by the Western farmers for their crops. The owners of the patents are entitled to this, for it was so nominated in the bond, but what reason there is for giving them more we cannot comprehend. The patent is a tax on the entire eastward movement of Western produce through the Erie Canal. Public policy forbids its continuance a moment longer than the original life of the patent. These days of short crops and short prices are times for taking taxes off, not keeping them on; but there are some men in Congress whose only idea of public duty seems to be to maintain every tax that was ever imposed, and to do this for the benefit of some special private interest. Certain it is that the members of Congress who vote for this extension, if finally there are any who will venture to do so, will be judged to have acted for the personal benefit of a few, and against that of the people."

AN act has been introduced into the Legislature of New York, to prevent "scalping" in connection with the canal and water transportation of the state. Three sections of the act specify parties whose operations with reference to the carriers, come under its jurisdiction, namely: Owners of freight or merchandise, to be thus transported; contractors for transfers; elevator and storage operators; commission merchants or agents; forwarders and shippers, or any persons negotiating between the owners of commodities to be transported, and the proprietors of boats, or any persons in any way interested in the ownership or handling of such merchandise or commodities. All such parties are forbidden to demand or receive, directly or indirectly, any fee, reward, drawback, percentage, or any consideration whatever from carriers for the transportation of such freights, or for any services rendered in any way for that purpose to said carriers. The penalty, on conviction, is to be adjudged guilty of misdemeanor and punished with a fine of not less than \$100 or imprisonment in a county jail for not less than two months, or both fine and imprisonment. Parties thus injured may sue for and recover any damages they may have sustained. The act is to take effect immediately.

THE wheat crop of California, at about the time of harvest, promised a larger return than any hitherto gathered, many journals estimating the surplus at 1,500,000 tons. But the New York *Produce Exchange Reporter* states that advices since the harvest show what that paper had steadily predicted, that the crop had been greatly overestimated, as the shipments for six months from July 1, were equivalent to only 470,000 tons of wheat, and flour calculated as wheat, while the San Francisco Produce Exchange estimated the supply remaining Jan. 1 at 370,000 tons. The *Reporter* had predicted that enormous losses would be entailed upon the grain fleet of California by these exaggerated estimates. This is now an accomplished fact on the Pacific Coast, and another instance of the ruinous effects of misrepresentations that are made, harvest after harvest, as to the extent of the wheat crop. It is well understood, says the writer, that these reports are chiefly due to the "bulls" on the stock exchange, and the "bears" in the grain trade, whose interests are thus combined on the one hand in elevating railway shares, and on the other in depressing the price of grain. The surprise is that shippers never seem to learn these oft-repeated lessons of experience. During the memorable season of 1879-80, when the cereal supplies of Europe were persistently belittled,

and those of America greatly exaggerated, this delusion attracted a large fleet of vessels to the Atlantic Coast, while, fostered by a syndicate of American speculators, prices were kept so inflated as to preclude a free outward movement of wheat, and hundreds of ships, barges, etc., lay rubbing the wharves for months under heavy expenses. On the Pacific Coast this season the same ruinous experience is being repeated. "And these tremendous evils can be easily traced to misrepresentation and downright lying."

THE Grain Committee of the New York Produce Exchange decided the matter as to the 500,000 bushels of wheat "posted" by Hazeltine & Co. on Jan. 14, which was in the Dows store on Feb. 7. Mr. Stephen B. Post, who held receipts for 144,000 bushels of this wheat, claimed that his wheat should not have been posted, but the property of David Dows & Co. should bear the loss. Some days prior to the posting the latter had surrendered their receipts for cancelling, but, Mr. Post claimed, had not removed their grain; and that the receipts could not be cancelled without such removal. The committee unanimously, however, decided that Hazeltine & Co., who had leased the stores of David Dows & Co., had acted strictly in accordance with the rules of this exchange in posting Mr. Post's wheat. No fraud or collusion had been charged by the latter. Some of the members expressed the opinion that while the decision closed this case, it would lead to a modification of the rules of the Exchange to guard against any possible collusions in future.

THE New York *Produce Exchange Reporter* calls attention to the importance of taking into account the relative flour or bread producing quality of our wheat in estimating the supplies of the world previous to the next harvest. A large proportion of our estimated crop of 420,000,000 bushels, especially of winter wheat, is deficient in weight and condition, as compared with good grain, to the extent of some five or six pounds per bushel; this implies a discount in its flouring value of a total of from 35,000,000 to 42,000,000 bushels. The quality of the stocks in the ports of the United Kingdom is also reported poor, as is much of the grain in the provincial markets; while the millers find the difficulty in getting full weight grain is increasing. This state of things, in the middle of the cereal year, points to an increase in price as we approach the next harvest. This influence will be slow and subtle, and may be greatly affected by the prospects of the growing crop, either in advancing or holding the market, or in neutralizing these influences. The opinion, says the writer, is evidently gaining ground that the area of the world's wheat production is relatively being enlarged more rapidly than the requirements of its population.

MAJOR W. H. H. BENYUARD, of the U. S. Engineer Corps, surveyor of the Hennepin Canal routes, in his report to Congress, says: Actual results are shown already as due to the direct competition of canal and railroads in the case of the Illinois and Michigan Canal and the parallel roads. The railroad commissioners of Illinois established the freight charge on wheat by rail last season at 11 cents per 100 pounds or 60 cents per bushel for 100 miles, the distance from LaSalle to Chicago; for 130 miles, the distance from Henry, on the Illinois River, to Chicago, 12 cents per 150 pounds, or 7.2 cents per bushel; for 182 miles, the distance from Rock Island to Chicago, 13.4 cents per 100 pounds, or 8.2 cents per bushel. It has been freely stated, and generally believed, that the railroads have regarded these rates of the commissioners as too low. Yet, wheat was last season taken from Henry and from Peoria, each on the Illinois River, for 3 cents per bushel by rail, while the schedule rates were 7.2 cents per bushel. Thus were the rates of the railroad compelled to fall to a point of equality with those of the canal; while on lines not so placed in competition with that water route, the rates from shipping stations of equal distance from Chicago with those of Peoria, Henry, and LaSalle were required to pay the full schedule rate as established by the commissioners.

Notes from the Exchanges.

The Cincinnati Chamber of Commerce has \$500,000 on hand to build a new chamber.

The board of directors of the Corn and Flour Exchange, of Baltimore, Md., met on Jan. 30 and elected the following officers: President, George H. Baer; first vice-president, John Gill; second vice-president, E. M. Schryver; treasurer, George T. Kenly; secretaries, W. F. Wheatley and H. H. Wroth; executive committee, Robert S. Fowler, Samuel E. George, Samuel C. Crocker and Jarrett N. Gilbert.

The New York Produce Exchange, which went into the assessment life-insurance business some little time ago, when that peculiar form of supposed indemnity was in the flush of its popularity, is now discovering its mistake. As the society and members grow older deaths increase; and, with no cash reserve to draw from, and only the contributions of survivors to look to, the "insurance" is found to be both unfair and uncertain. The local columns of the New York Times of the 6th inst. refer to the present status of the case as follows: There was another death reported yesterday among the members of the gratuity fund of the Produce Exchange, bringing the number reported to within one of the total estimated for the year, which will not expire until April 1. As the number for the last year overran the estimate, and the present year will also show a larger number than expected, there is much dissatisfaction among the members of the fund at the prospect of increased assessments to meet the calls to provide for the families of the deceased members. A member said yesterday that he had conversed with a large number of fellow-members on the subject, and it was evident that a modification of the original plan had become a necessity. The fault of the present plan was that too many of the older members had been taken in when the fund was instituted, and the deaths among this class had been so frequent that the younger members were called upon for assessments which were in reality not equitable or fair.

The thirty-fourth annual meeting of the Chamber of Commerce of San Francisco, Cal., was held at the Merchants' Exchange on Jan. 15, p. m., President Hon. Horace Davis in the chair. The records showed a membership of 168 at the beginning of the year; that four new members had been elected; seven had died; eight resigned; and one had been dropped from the roll for non-payment of dues, leaving at present 156 enrolled members. The President's report referred to the work done in 1888, as pertaining to investigations as to pilotage and towage, and memorializing Congress on subjects as follows: Against the proposed transfer of the Coast Survey, the Marine Hospital Bureau, and the Revenue and Life Saving Service from the Treasury to the Navy Department; in regard to a National Bankruptcy Law; on extending the Life Saving Service to the Pacific Coast; and the deaths of members, to whose memory he paid respectful tributes. He said that some of the tonnage matters in complaint had been partly remedied. The city and state had been fairly prosperous during the year in its increase of population, capital and export values. In spite of light rainfalls and blighting north winds in June, there had been a handsome harvest of grain, especially considering the ruling high prices. The anticipated reduction of freight rates due to new trans-continental and branch lines of road had not been realized; but there is now a competition in speed and comfort. The competition of the two lines has affected the character of the trade; the Northern taking away considerable of the traffic in the Atlantic states products, partly compensated by an increased demand for the products peculiar to that section; while the line of the Atlantic & Pacific has opened up a long stretch of fertile country for settlement, which will be tributary to San Francisco. The year has been unfortunate for the shipping interests. Accumulation of tonnage in the harbor, with the partial failure of crops, forced freight rates down to \$6.62 on first-class iron ships to Cork on orders, a lower rate than ever before known. Holders, however, have realized prices above the average, although the English market reached a point lower than any known for the last twenty years. No attempt has been made to open up the New Orleans outlet for grain. Mr. Nimmo's reports place the all-rail rates from Chicago to New York—972 miles—at an average of 14.6 cents per bushel of 60 pounds; ocean steamers, New York to Liverpool—3,542 miles—at 7.76 cents, the lowest average ever known. Estimating the increased mileage at the same rate, from the Pacific Coast, would bring the cost up by land and sea to 50 cents per bushel, or \$19.50 per 2,240 pounds. But Mr. Nimmo says also, that trunk lines can carry freight at one-quarter of a cent. per ton per mile. This new basis would make the freight to New Orleans \$6.24 per ton of 2,000 pounds; and \$4.81 from thence to Liverpool; a total of \$11.05, or \$13 for a long ton. With the lowest figures named, it is still apparent, says the President, that sailing ships may yet find profitable employment in grain-carrying to England at prices ranging upward from \$12.50. President Davis thinks the real hope of that section lies in inter-oceanic canals, which will open their grain trade to a true competition by means of iron steamers, now employed all over the world. The President hoped that Congress would relieve our ships from unnecessary burdens imposed on them, and place them on a level with those of other nations. In that case we might hope that American capital would again seek investment in tonnage, and our merchant marine resume its former glory.

OUR WHEAT SURPLUS.

The New York Tribune publishes an analysis of wheat production and consumption for many years past for the purpose of arriving at an intelligent idea of the present available surplus in the United States. The method of handling and the comparison with growth of population, estimated according to the most probable rate of increase, etc., are almost identical with those used in our annual review of thirteen months ago. The conclusions then arrived at were justified by the subsequent facts. Those presented by the article under review are open to serious question. The writer thinks it probable that about 76,000,000 bushels of wheat will be on hand in the United States at the beginning of next July to be carried over into another crop year.

There is some reason to think that our available supply, both of wheat and corn, is smaller per capita than at the same date in any recent year—in spite of statistics and conclusions drawn therefrom. We had a big wheat crop in 1882, and the large surplus left over six months ago was a strong argument in favor of selling, while it made the smaller crop of last year seem oppressive. There was a free current of wheat from first hands for several months, holders vying with each other for a market; and, as a consequence, the diminished surplus came out into strong relief in the shape of an enormous visible supply, that has persistently grown till a very recent date. Now it is rapidly lessening, with an unusually small movement from the farm, and all the indications point to the belief that there is little more to come. The winter wheat surplus appears to have been practically exhausted already, except the moderate quantities now in store at principal receiving points. There is still some spring wheat unmarketed in the Northwest, but the fact that the Minneapolis millers voluntarily advanced their prices five cents less than two weeks ago does not argue that they think the remaining stocks in that region are much larger than can be used by home millers. The men in St. Louis who manufacture flour are reported to be on the lookout for wheat upon which they can draw in case of a failure in the usual sources; and all over the West the millers are paying more for wheat than can be obtained by sending it to the seaboard. At many points they are actually paying within a small fraction of the prices quoted in New York for the same article.

We do not write this for the purpose of exciting alarm, still less with a view to influence the market. There will probably be "enough wheat to go around" before the advent of another crop; and it is certainly to be desired that we shall not soon again see an era of such high prices as those which nearly destroyed the foreign demand for our wheat in recent years. But neither is there any good reason for depressing prices in alarm about the idea of an unusable surplus which is not in existence. The people of Europe claim to be more independent of us for food supplies than usual. Admitting that the claim is well founded, there is still no occasion to borrow trouble. But the fact is that the foreign wheat buyer has been more oppressed by the sight of large quantities in store than we have been, and is by no means out of the woods yet in the matter of food-supply between this and next harvest. In any event, the facts, so far as they can be now read, point to the conclusion that our visible supply on the eve of next harvest will be a small one instead of oppressively large.—Chicago Tribune.

CANADIAN WHEAT CROPS.

We have no data in regard to area cultivated to wheat in Canada and the extent of its production from year to year that is deemed at all reliable, but satisfactory approximate estimates of the crops in that country may be arrived at from data of another kind. For instance, the population of Canada is now about 4,500,000. The consumption is estimated by competent authorities there at 5 bushels per capita, and the requirements for seed at 1½ bushels per acre. The net exports from and the net imports into Canada for a series of years have been as follows, flour reckoned at equal to 4½ bushels of wheat per barrel:

EXPORTS AND IMPORTS, FISCAL YEARS ENDED JUNE 30.			
1875-6.....	3,580,150	1879-80.....	6,586,667
1876-7.....	2,911,327	1880-81.....	3,511,122
1877-8.....	3,581,610	1881-82.....	3,078,021
1878-9.....	3,998,307	1882-83.....	

*Net imports.

It will be seen that the largest net export was in 1879-80, when it amounted to less than 6,000,000 bushels. Placing the consumption at 5 bushels per capita would require 22,500,000 bushels, and for seed 2,500,000 may fairly be allowed, thus giving a total for home wants of 25,000,000 bushels. The last crop was probably poorer in quality and smaller in quantity than any gathered for many years past, not even excepting that of 1876, and instead of exporting wheat Canada will require very considerable supplies from this side of the border before another harvest is gathered there.—Ez.

THE GRAIN TRADE OF MONTREAL.

In a letter to the Toronto Globe, Mr. R. H. Ferguson comments upon the statements made by Mr. Watt at the annual meeting of the Montreal Corn Exchange, reported in our last issue, in regard to the relative decline of the grain traffic at that port. Mr. Watt stated that while Montreal in 1873 carried 20 per cent. of the entire grain exports of Canada and the United States, that in 1883 these exports had declined to 7½ per cent., a loss in ten years of 12½ per cent. This is a loss, says the writer, which affects the whole Canadian carrying trade, rail-

way, canal, lake and river. The main causes, he says, lie in the increased and cheapened transportation facilities for grain created by the States. The American Atlantic ports seeing in 1872-3 the strides Montreal had made in exporting American grain, at once took measures to check the movement. The New York Central constructed a four-track road. Rival routes were projected and constructed to Philadelphia, Baltimore and Boston, the Hoosac tunnel opening a competing route to the latter. The West Shore has opened a rival double track from Buffalo to New York. But as all of these, with the Erie Canal, are inadequate to carrying the grain products that will ere long seek an outlet through the Hudson Valley, American capitalists, grain dealers, etc., have asked Congress to make the Erie a free, national ship canal, and a bill to that effect has been presented. This is the character of the competition Canada has to meet in the grain traffic; and while the proposed removal of harbor, canal tolls and wharfage may contribute something to a desirable result, it is far from being all that will be demanded of the enterprise and capital of the Dominion to recapture her commercial position. Canadian trunk lines, says Mr. Ferguson, should avoid pooling with American lines; and he hints that he knows many facts, showing how New York increases her grain exports, "and the various means to which her lines of road resort to accomplish such a result, which will not do to publish in a newspaper article."

THE WHEAT TRADE AT MINNEAPOLIS.

The market of Minneapolis, Minn., is principally characterized by the amount and quality of the flour manufactured there, exceeding that of any other city of the world. The result of this industry on the grain trade is to make it the grand central wheat-buying market of the Northwest, especially of the peculiar grades of Nos. 1 and 2 "hard." The following tables present the total receipts and shipments of wheat at that market for the four years named:

BUSHELS OF WHEAT RECEIVED.				
	1883.	1882.	1881.	1880.
By rail.....	18,172,753	17,503,700	16,317,250	10,264,100
By team.....	1,000,000	900,000	850,000	650,000
Total.....	19,172,753	18,403,700	17,167,250	10,914,100

Increase over 1882, 769,053 bushels.

BUSHELS OF WHEAT SHIPPED.				
	1883.	1882.	1881.	1880.
Total.....	2,279,728	2,054,500	514,750	183,600

Increase, 225,228 bushels.

The following table shows the receipts and shipments of wheat at Minneapolis during the six years named:

	Receipts, Shipm'ts.
1878.....	5,040,990 199,300
1879.....	7,991,913 177,400
1880.....	10,914,100 183,600
1881.....	17,167,250 514,750
1882.....	18,403,700 2,054,500

The shipments were mainly of damaged wheat, or that not considered suitable for milling purposes there. The only attempt at exporting wheat from Minnesota was in 1880, when the New Orleans barge line took, for a New York firm, 30,000 bushels of wheat from St. Paul, shipping it to Liverpool. The result did not encourage further like ventures.

OHIO'S CANAL SYSTEM.

FIGURES FOR THE PAST YEAR—FALLING OFF IN RECEIPTS.

The forthcoming report of the Board of Public Works will show that the canals of the state have cost much more than the revenue. The reasons for this are given, and should there be no further mishaps from the elements the revenues for future years will probably quite well repay the labor of maintaining them. The receipts and expenditures have been as follows:

Miami and Erie Canal.....	\$ 88,938.12
Ohio Canal.....	44,773.52
Muskingum improvement.....	16,590.69
Hocking Canal.....	3,693.47
Walhonding canal.....	920.42

Total collections.....\$155,016.22
The disbursements have been \$220,035.45, leaving a deficiency of \$65,019.23. The special appropriations and what was at hand at the beginning of the year, amounted to \$248,290.40. The Miami and Erie Canal was the only one that has paid its own way, having a surplus of \$11,009.03.

The heavy expenses were made upon damages caused by the floods of the past two years, and the dams and locks have been put in excellent condition—better than for many years before, so that there will be no necessity for such large expenditures. Had it not been for this, the canals would have shown a surplus of nearly or quite \$50,000.

Samuel Bitler, mayor of Wapakoneta, Ohio, made an assignment on Jan. 11. His liabilities are from \$60,000 to \$100,000, and his assets are estimated at \$80,000. He dealt extensively in grain; was the sole owner of the Farmers' Bank, and was connected with the leading manufacturing industries there. The cause of the failure is said to be recent heavy losses in Chicago option deals.

The Trade.

Sinker, Davis & Co., Indianapolis, manufacturers of engines, boilers, and mill furnishing goods generally, are quite busy, enjoying a fair portion of trade and running a full force of hands. The demand for their new stationary engine is rapidly increasing.

The Westinghouse Machine Company, of Pittsburg, Pa., report trade for the new year as being very brisk. Among recent orders they mention three engines for Australia, one for Japan, one for France and one for Holland.

The Lechner Mfg. Co., Columbus, Ohio, manufacturers of roller detachable chain belting, for elevators, etc., have furnished Arkansas Oil Co., Texarkana, Ark., with additional roller chain; Philadelphia Grain Elevator Co., Philadelphia, Pa.; Upham, Sons & Co., Blue Rapids, Kan.; Scott, Dempster & Co., Knoxville, Tenn.; J. Herman Taylor, Pearl, Kan., with roller detachable chains. This company has also furnished a large number of manufacturing establishments with chain elevators, etc.

The Link-Belt Machinery Company, of this city, represents that its business being largely in the special line, and new, it has felt the recent depression but little, and is not affected by the conditions of the general market; that its business has grown steadily, the trade for December last largely exceeding that of the same month in 1882. They also stated that trade in their general line of machinery had increased to a considerable extent, due to the fact that they had given more attention in this direction. Prices in their special lines were substantially the same as heretofore, while on general machinery they showed considerable falling off. They gave it as their impression that the outlook for '84 indicated at least as good a trade as that of '83, and they looked for a rather decided improvement all around. Their export as well as their home trade had grown, and they reported an increase in '83 over '82 of 30 per cent. They did not believe that prices in their general lines of goods would go lower, notwithstanding the fact that there is a disposition to push sales, and they rather looked for them to recover somewhat. In their specialties they governed their own prices. Their works were being run on full time with a full complement of men.

Fires, Casualties, Etc.

Benjamin Jones, grain broker of New York City, died recently.

Knight & Tinder, grain dealers at Monticello, Ill., are reported burned out.

A. Armstrong & Co., grain dealers at London, Wis., have been burned out.

The death is announced of Sidney Sanderson, grain broker, New York City.

The Ogilvie Elevator, at Manitou, Man., has been slightly damaged by fire recently.

Dudley & Bro., grain dealers at Baird, Tex., have been burned out. They were insured.

Geo. C. Norton's grain elevator at Jonesboro, Ind., was burned on the evening of Feb. 14. Loss \$12,000; partly insured.

Leeson's grain elevator at Leon, Iowa, was burned Feb. 12. The cause of the fire was unknown. Loss, \$10,000; insured for \$3,500.

Hurley & Son, dealers in grain and feed, at Nashville, Tenn., were burned out recently. Loss, from \$3,000 to \$4,000, with \$3,000 insurance.

The large elevator at Weldon, Ill., owned by Bennett & Robinson, was destroyed by fire on Jan. 14. The loss was \$6,000; insurance \$4,000.

The elevator of R. O. Applegate, at Vincennes, Ind., was burned, with contents, at an early hour on the morning of Jan. 25, entailing a loss of \$3,000; insurance, \$2,100.

During the month of October, 1883, according to the New York *Chronicle*, there were five grain elevators and four grain warehouses burned in the United States, and two warehouses in Canada.

John Rippe, a grain buyer at New Alba, Winneshiek Co., Iowa, hanged himself on Jan. 14, in his warehouse. He was 30 years of age. A love affair is supposed to have been the prompting cause.

The warehouse connected with the Fergus Falls Flour Mill Co.'s elevator, at Minneapolis, Minn., collapsed on the evening of Feb. 2, letting out 40,000 bushels of wheat, mingled with the wreck. Three box cars were also wrecked. No one was injured. The loss was \$70,000.

At 7 o'clock on the evening of Jan. 31, a destructive fire broke out in the Adamson and Chapman Elevators, two of the largest houses in Toronto, Ont., and in a few hours both were entirely destroyed, with grain amounting to some 170,000 bushels. The fire originated somewhere in the northwestern portion of the Adamson Elevator, which had been closed up at about 5 o'clock, but the exact locality and cause are unknown. No lights had been left burning, and none had been used during the day, and the building, being solidly built, was considered one of the safest of the kind in the city. There were stored in it about 150,000 bushels of grain, mostly

wheat, owned by various parties, and fully insured. The total loss between the two houses is estimated at from \$200,000 to \$250,000. The insurance on Mr. Adamson's building is \$6,000. In Chapman's Elevator, valued at \$15,000, there were stored 25,000 bushels of grain, mostly wheat. Chapman & Son were insured for \$18,000, and all the grain stored is said to have been insured.

The steam elevator at Brownsdale, Minn., was recently burned, containing about 8,500 bushels of grain and seed, of which \$400 worth was destroyed. The house had been closed up for the night, and when discovered the fire had made too great headway to save the building; the cause is unknown. The house was built in 1884, at a cost of \$6,000, with a capacity for 30,000 bushels of grain, and was owned in equal shares by C. A. Bigelow, James Stewart, and Mrs. J. C. Thatcher. The insurance on building was \$4,000 and on grain \$3,000.

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GLASCO, KANSAS, January 4, 1884.

Barnard & Leas Mfg. Co., Moline, Ill.:

GENTLEMEN—After having used your *Victor Corn Sheller* and *No. 1 Improved Corn Cleaner* in our elevator for some six months, we wish to congratulate you upon furnishing the *ne plus ultra* of Corn Shellers and Cleaners.

We have never used the equal of the machines you furnished us. They do their work to our entire satisfaction. Very respectfully yours,

W. R. WEST & CO.

BALTIMORE, MD., January 29, 1884.

Barnard & Leas Mfg. Co., Moline, Ill.:

GENTLEMEN—Your draft in payment of No. 3 Warehouse Separator and Grader purchased of you, was presented several days ago, and paid. The machine gives us great satisfaction, and we unhesitatingly say that we believe it to be the *best* one in the market for cleaning and grading *all kinds* of grain. We shall take pleasure in recommending it to any one wanting such a machine. Our only regret is that we did not get one of double the capacity. Very respectfully,

SWIFT & LUCY.

For Sale.

FOR SALE.

Eight-horse power horizontal Erie Engine and ten-horse power horizontal tubular boiler, all complete. Used but two months. Good as new. Price \$325. Address, H. P. YALE & Co., Milwaukee, Wis.

FOR SALE CHEAP.

A new Seeley Elevator complete, in Western Iowa, in a splendid grain country. Capacity of Elevator, 20,000 bushels. Best reasons for selling. Address SEELEY, SON & Co., Fremont, Neb.

PARTNER WANTED.

In a mill and elevator business in Kansas. Both mill and elevator are nearly new and thoroughly equipped. Splendid grain country. Have too much to attend to, and want a partner. No better chance anywhere offered, to the right kind of a man. Address

M. J., care AMERICAN ELEVATOR AND GRAIN TRADE, Chicago, Ill.

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For sale, a good elevator and warehouse with a capacity of 40,000 bushels, at Iowa Falls, Iowa, and another with a capacity of 15,000 bushels at Robertson, seven miles distant. Now have over 35,000 bushels of oats on hand. Good buildings, complete; dumps, etc., etc., and a good business. This is the best hog county in the state, and a good cattle section. Outlets good to North, Northwest, South, Southwest, and East and Southeast points. Three railroads here, and one of the best inland towns in the state. Good thing for the right party. Address

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LARGE ELEVATOR FOR SALE.

On Chicago & Alton R. R., in Logan county, Ill.; located in the best corn district in the state. Main building, 26x50 feet; north wing, 20x70 feet. Crib attached on west side, capacity 6,000 bushels. This crib is filled by an endless belt. Same belt conveys corn to the sheller in basement of main building. Hopper scales in top of main building 250 bushels capacity. Main building three stories above basement with ten large bins, six loading spouts to cars, Moline Separator and Sheller, 5,000 bushels capacity, both new. Separator in top of main building. Three Hinman Dumps, best in use, with three bins underneath. Elevators connecting from these

bins to those in main building. Twenty-four horse power engine, new. Good office attached to elevator; 22-ft. Fairbank Scales. Also nine first-class corn cribs in elevator lot, capacity 50,000 bushels. Also two good warehouses, 35x40 feet and 20x40 feet, one 200 feet and the other 280 feet south of elevator, all on railroad side track.

The business amounts to about 225,000 bushels of corn and 50,000 bushels of small grain annually. Location about midway between Chicago and St. Louis. Possession can be given at once. Property worth \$10,000 can be bought at nearly half its value if trade is closed immediately. Will guarantee a visit and personal investigation to prove satisfactory. Address

WESTERN GRAIN DUMP Co., Lincoln, Ill.

Special Notices.

The Chicago Scale Co. sell Scales of all kinds also Portable Forges and Blacksmiths' Tools of all descriptions at about one-half usual prices. Buyers will save money by sending for their Price List.

Elevator Men—Howes & Ewell, of Silver Creek, N. Y., make a full line of wheat cleaning machinery. Read their advertisement on first cover page.

GRAIN ELEVATOR WANTED.

May or June 1, 1884, to lease, for one or five years, a steam or horse-power elevator on line of railroad running into Peoria, Ill. Address

ILLINOIS ELEVATOR,

Care AMERICAN ELEVATOR AND GRAIN TRADE, 184 & 186 Dearborn St., Chicago, Ill.

WANTED—BUSINESS OR SITUATION.

June 1, 1884, a situation with some live grain merchant, or to work on joint account. Have a capital of \$2,000. Best of references given and required. Have had ten years' experience in the grain business, and in keeping double-entry books. Can give \$10,000 bond. Address

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Simple, Durable, of Best Workmanship, and fully guaranteed. Boilers thoroughly tested. Springfield, Ohio.

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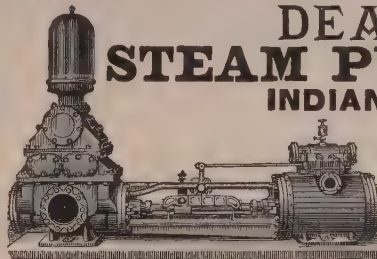
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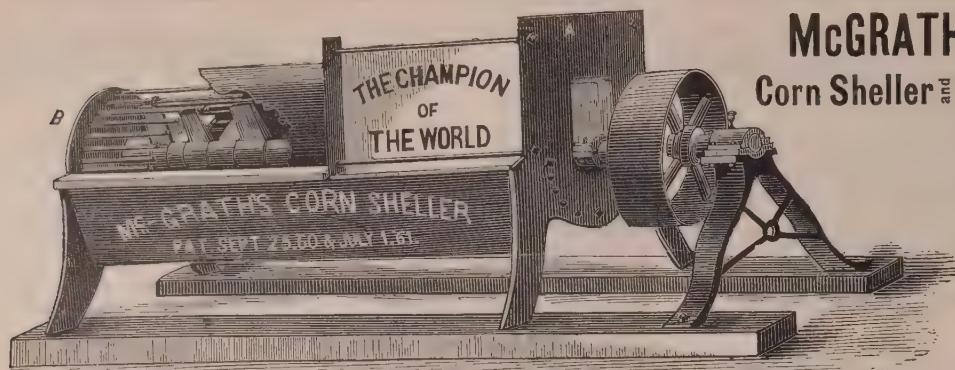


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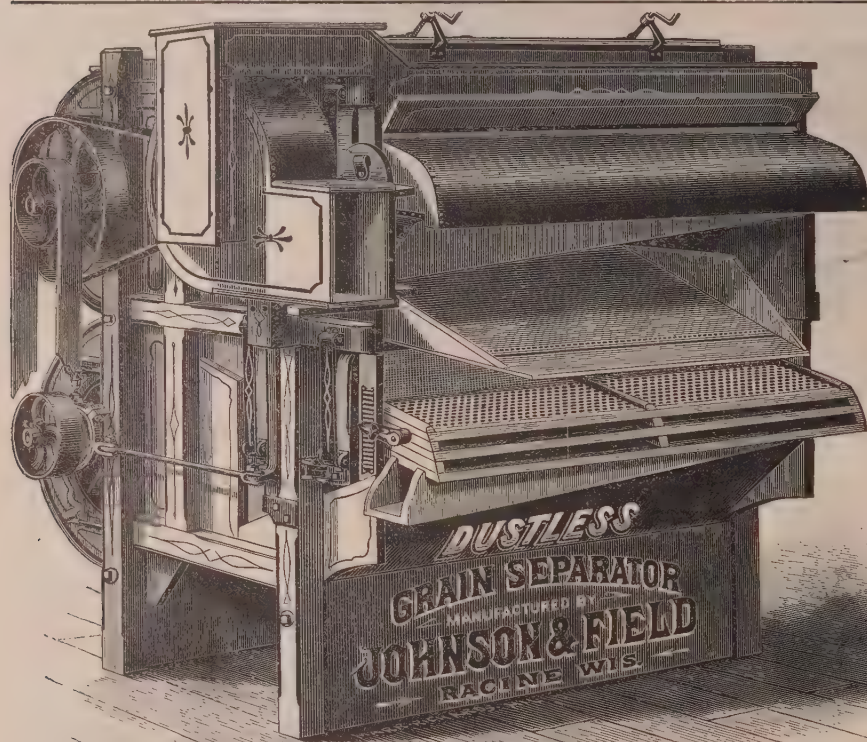
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Our aim has been to construct a machine that
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The accompanying cut shows our Dustless Sep-
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SECOND. **Their Light Running:** They can be run by horse power as
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THIRD. **Their Large Cleaning Capacity:** In constructing these ma-
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than any single machine of equal size.

FOURTH. **The Effectiveness of Removing Dust and Chaff:** By
combining the Dustless Fan with these machines all dust and chaff can be taken
out and carried through spouts to outside of building or into a dust-box, thereby ob-
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the discomfort and injurious effect on men working therein.

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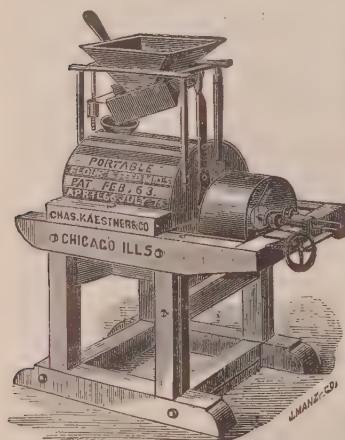
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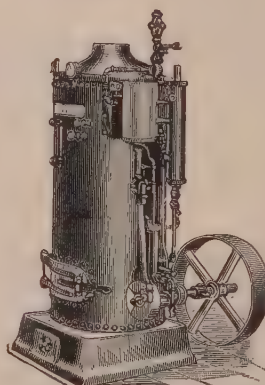
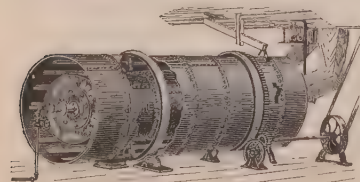
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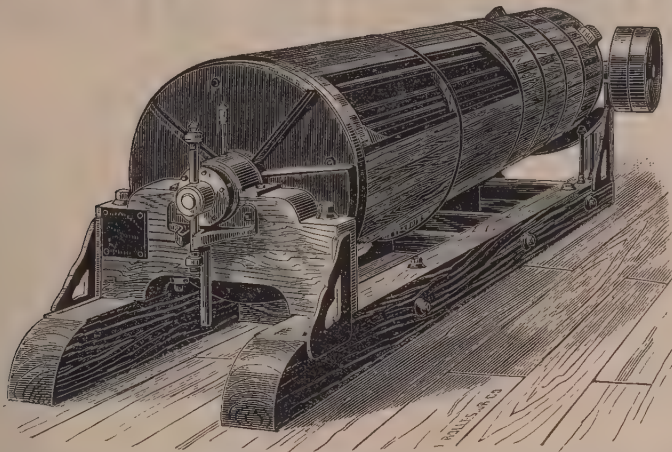
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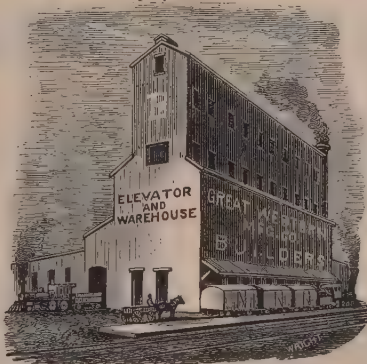
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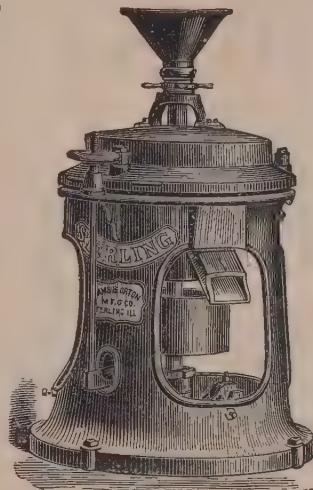
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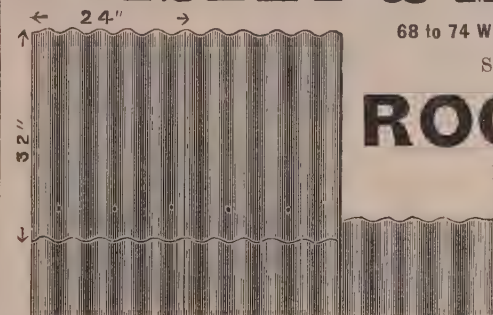
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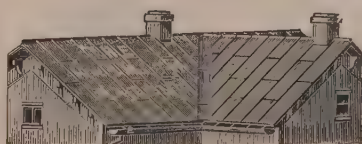
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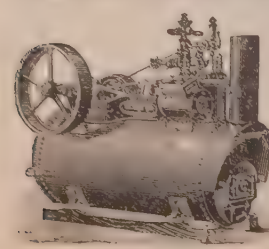


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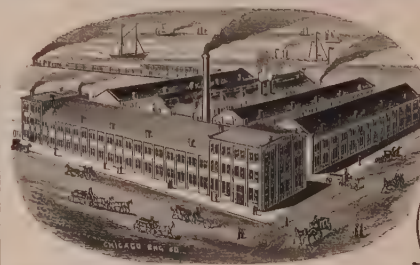
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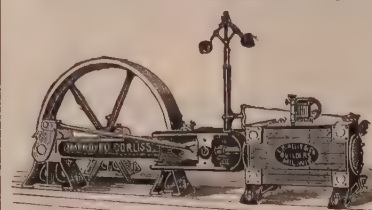
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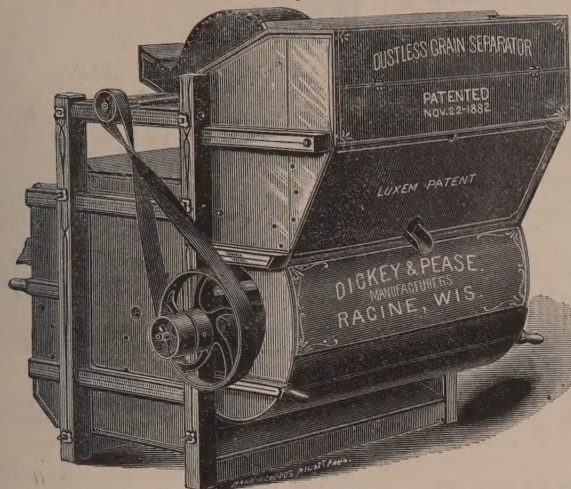


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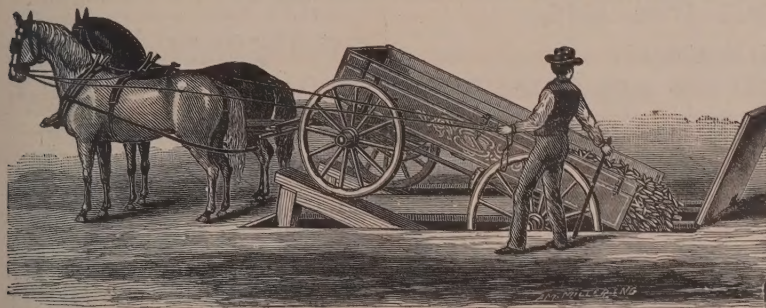
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This is the only machine in existence that fairly deserves the name of "Dustless Separator." It is the only one that takes the dust and light chaff out of grain as it passes into the "Separator," thus separating the oat from wheat or barley—screening the grain, and grading it, if desired—all at one operation. The dust is conveyed out of doors into a bin by means of a spout attached to the suction fan box. Capacity from 400 to 600 bushels per hour, according to the class of the grain. We guarantee, every machine to give satisfaction. Circulars giving full particulars and prices, furnished on application to

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The above cut is a fair representation of the Rail Dump in common use, on which we are collecting a royalty for past use, and licensing parties to continue to use and also put in New Dumps. Our patents on Rail Dumps fully cover this class of Dumps. Any one using Rail Dumps can readily decide by comparing his Dump with this cut, whether he infringes or not. We also control patents that cover Platform Dumps. Our prices are reasonable in settlements for past infringements, and for licenses to continue to use the Dumps. Prices given on application. See notice below.

NOTICE.

To Parties Using Grain Dumps.

Notice is hereby given that we have been retained to prosecute infringers of the following Letters Patent on Grain Dumps:

One granted to Noah Swickard, Oct. 13, 1868, No. 88,005. Reissued Dec. 20, 1870, No. 4,212, for Improvement in Wagon and Car Unloading Apparatus.

One granted to Samuel C. Kenaga, Oct. 20, 1868, No. 83,288, for Improved Dumping Platform.

One granted to Benjamin Walton, Nov. 31, 1869, No. 97,252, for Improved Dumping Machine, and

One granted to Wm. M. Hall, Sept. 6, 1870, No. 107,040, for improvement in Grain Dumps, and all persons or parties manufacturing or using Grain Dumps which infringe on any of the above described Patents must make settlement for all past infringements, and take license in accordance with the usual terms, if they desire to continue to manufacture or use the same, or legal steps will be taken to enforce said Patents against all infringers.

Applications for licenses for using said patented improvements, and for settlement for past infringements should be addressed to

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BURNET & BURNET,

Complainant's Counsel, Cincinnati, Ohio.

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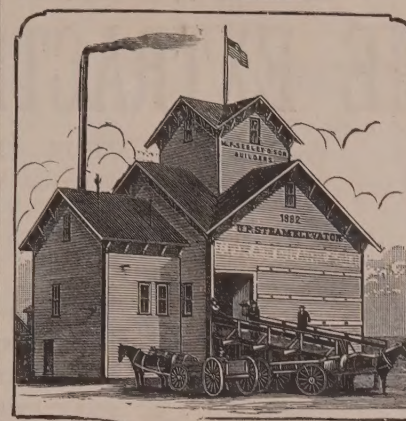
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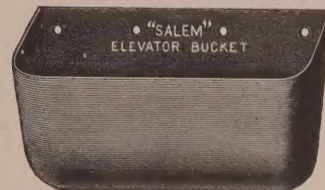


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TO GRAIN SHIPPERS IN KANSAS!

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IN KANSAS. References for other States on application.

	9 Dumps in Use.
E. P. Purcell Elevator Co., Manhattan	3
Lockwood & Co., Independence	3
Davis & Co., Fort Scott	2
Chamberlain & Co., Humboldt	1
J. P. Haines & Co., Augusta	1
Todd & Harrold, Wichita	1
W. W. Kirkpatrick, Garnett	2
Geo. W. Bowen, Independence	1
Wilson & Simonson, Parsons	4

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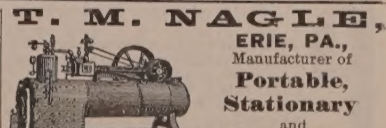
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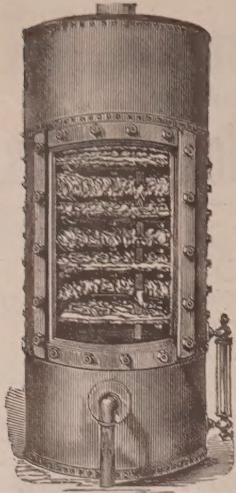
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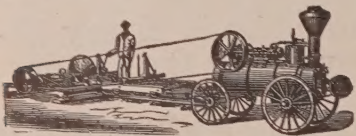
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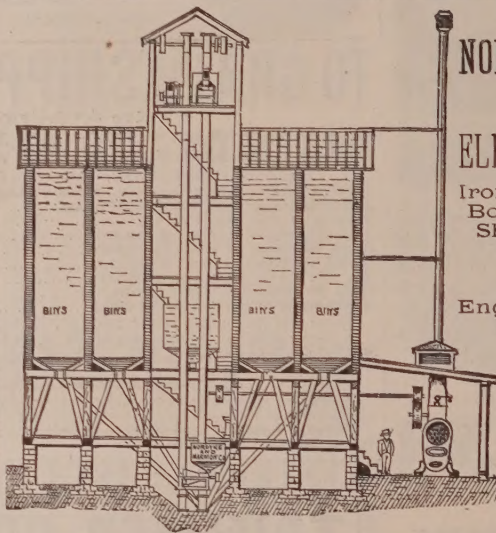
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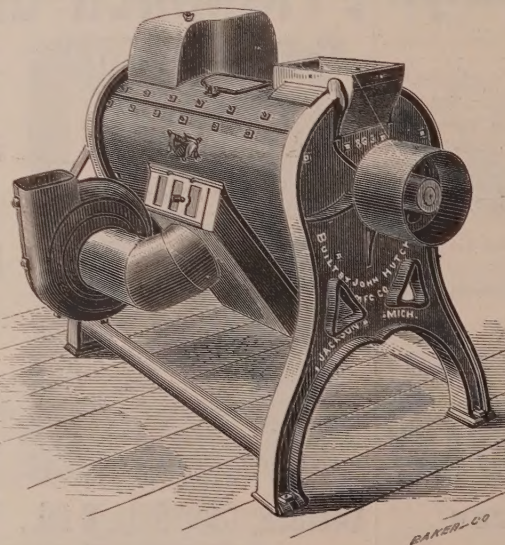
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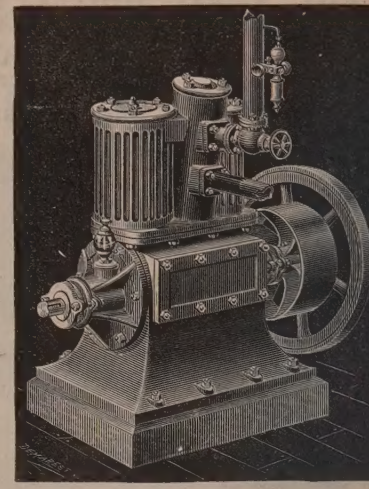
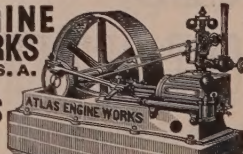
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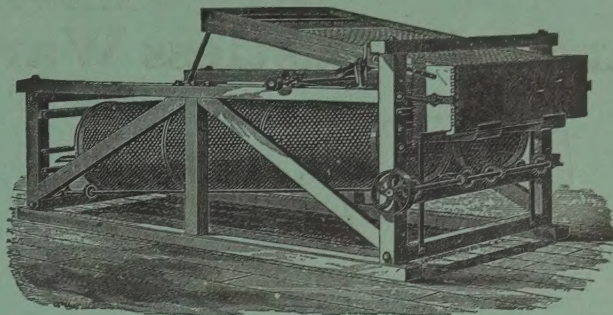
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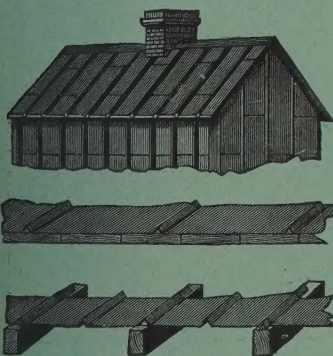
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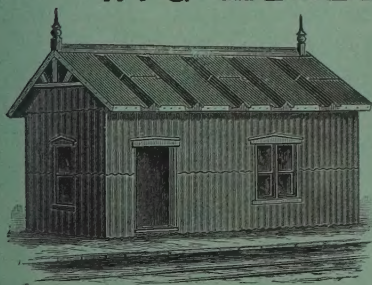
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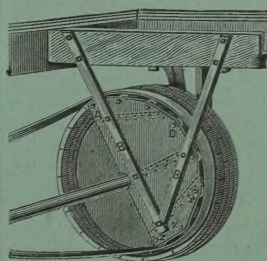
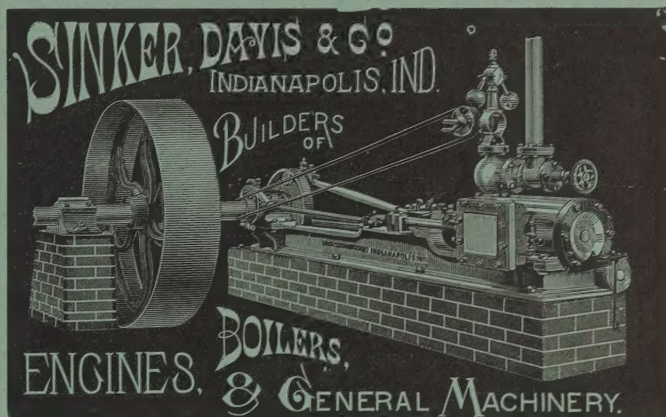
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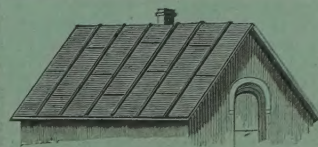
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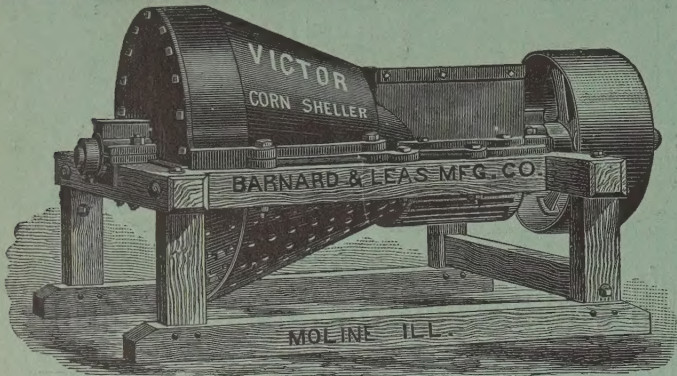
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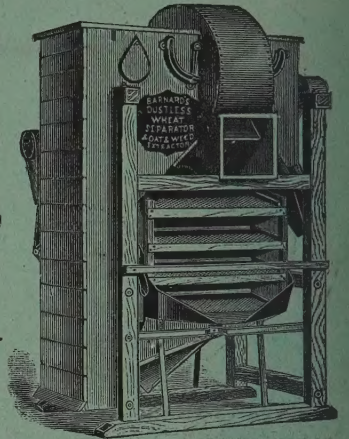
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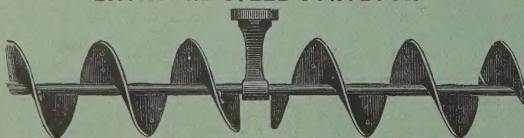
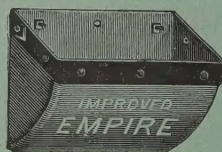
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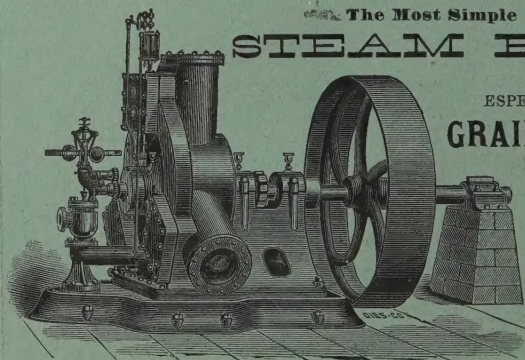
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